



Town Board of Trustees

Tuesday, February 22, 2022 at 7:00 pm

**PLEASE SILENCE ALL CELL PHONE AND ELECTRONIC DEVICES.
THANK YOU.**

1. Meeting Information

207 Muegge Way, Bennett, CO 80102

For a live stream of the meeting use the information below:

<https://us02web.zoom.us/j/83482596020>

Meeting ID: 834 8259 6020

Passcode: 288312

One tap mobile

+13462487799

2. Call to Order

Royce D. Pindell, Mayor

a. Roll Call

3. Pledge of Allegiance

Royce D. Pindell, Mayor

4. Approval of Agenda

Royce D. Pindell, Mayor

5. Consent Agenda

Royce D. Pindell, Mayor

a. February 8, 2022 - Regular Meeting Minutes

Attachments:

- **February 8, 2022 - Regular Meeting Minutes** (02-08-2022_-_Regular_Meeting_Minutes.pdf)

Public Comments on Items Not Scheduled for Public Hearing

The Board of Trustees welcomes you. Thank you for joining us for our Town of Bennett Board of Trustees Meeting. If you are not speaking, we ask that you please mute your microphone. For public comment please sign up on the provided sheet or in the chat box. If you are on the phone, once we get through the sign-up sheet and chat box we will call for any other comments for items not on the agenda.

Your comments will be limited to three (3) minutes. The Board may not respond to your comments this evening, rather they may take your comments and suggestions under advisement and provide direction to the appropriate member of Town staff for follow-up. Thank you.

Regular Business

6. Public Hearing

a. Case 21.26 Bennett Ranch Filing No. 2 Final Plat

Resolution No. 905-22 - A Resolution Approving a Final Plat for Bennett Ranch Filing No. 2

Steve Hebert, Planning and Economic Development Manager

Attachments:

- **Public Hearing Script** (0_-_Public_Hearing_Script.PC.pdf)
- **Staff Report Case 21.26 Bennett Ranch Filing No. 2 Final Plat** (1_-_Staff_Report_BennettRanch_Filing2_FP_CaseNo.21.26_Boad_StaffReport_FINAL.pdf)
- **PowerPoint Presentation Case 21.26 Bennett Ranch Filing No. 2 Final Plat** (2_-_PowerPoint_Presentation_BennettRanch_Filing_2_FinalPlat_BoT_Presentation_02_22_22_FINAL.pdf)
- **Land Use Application** (3-Bennett_Ranch_-_Northern_Townhomes_-_Land_Use_Application__Signed_.pdf)
- **Letter of Intent/Narrative** (4-Bennett_Ranch_-_Northern_Townhomes_-_Letter_of_Intent.pdf)
- **Bennett Ranch Filing No. 2 Final Plat** (5-Bennett_Ranch_-_Northern_Townhomes_-_Final_Plat_-_2nd_Submittal.pdf)
- **Combined Staff and Referral Agency Comments** (6-Bennett_Ranch_Filing2_ReferralResponses_Combined.pdf)
- **Bennett Ranch Traffic Study** (7-Bennett_Ranch_-_Traffic_Impact_Analysis.pdf)
- **Planning and Zoning Commission Resolution No. 2022-03** (8-Resolution_No._2022-03_-_Recommending_Approval_of_a_Final_Plat_for_Bennett_Ranch_Filing_No._2.pdf)
- **Resolution No. 905-22 - A Resolution Approving a Final Plat for Bennett Ranch Filing No. 2** (9-_Resolution_905-22_BennettRanchFilingNo.2__BoT_reso_905-22.pdf)
- **Suggested Motion** (10_-_suggested_motion.pdf)

7. Action/Discussion Items

a. Request for Proposal (RFP) 22-002 - Bennett Regional Park and Open Space (BRPOS) Lower Pond Fishing Improvements

Robin Price, Public Works Director

Attachments:

- **Staff Report Request for Proposal (RFP) 22-002 - Bennett Regional Park and Open Space (BRPOS) Lower Pond Fishing Improvements** (0_-_TownofBennett_Staff_Report_22-002_Bennett_Regional_Park_and_Open_Space_Lower_Fishing_Improvements.pdf)
- **Request for Proposal (RFP) 22-002** (1_-_RFP_BRPOS_Lower_Pond_Fishing_Improvements_RFP_-_1-13-22.pdf)
- **Plan Set 1-13-22** (2_-_Construction_Plans_BRPOS_Pond_Grading_1-13-22_A_1_.pdf)
- **Kuhn Construction, Inc.** (3_-_Resume_Kuhn_Construction_BRPOS_Lower_Pond_RFP.pdf)
- **Kuhn Construction, Inc. Revised Bid** (8_-_Kuhn_Revised_BRPOS_Lower_Pond_RFP_Pricing_Form_Updated_Bid_1_.pdf)
- **Anson Excavating & Pipe, Inc.** (9_-_Anson_Excavating_Bennett_Ponds_Proposal_notes.pdf)
- **Request for Proposal (RFP) Addendum #1 Request for Information Responses** (11_-_Addendum_1_RFP_22-002_BRPOS_Lower_Pond_Fishing_Imp.pdf)
- **Suggested Motion** (12_-_suggested_motion.pdf)

b. Lafever Building Systems - Change Order PW-007

Daymon Johnson, Capital Projects Director

Attachments:

- **Staff Report Lafever Building Systems - Change Order PW-007** (0_-_Staff_Report_-_RFP_21-015_-_Aqua_Engineering_Eng._Services_-_DJ-RS-TH_FINAL_-_1.16.22.pdf)
- **Summary of Changes** (1_-_Summary_of_Changes.pdf)
- **Change Order No. 1** (2_-_Change_Order_PW-006_-_Material_Escalation_Costs_Final_TI_-_1.10.22_1_.pdf)
- **Change Order No. 2** (Change_Order_No._2_-_PW_Facility.pdf)
- **Suggested Motion** (3_-_suggested_motion.pdf)

8. Town Administrator Report

Trish Stiles, Town Administrator

9. Trustee Comments and Committee Reports

Mayor and Trustees

10. Adjournment

Individuals with disabilities who need auxiliary aids in attending the meeting may request assistance by contacting the Town Hall at 207 Muegge Way, Bennett, CO 80102-7806, (303) 644-3249. Please give notice at least 48 hours in advance of the meeting to allow for enough time in making the necessary arrangements.

TOWN OF BENNETT, COLORADO
BOARD OF TRUSTEES
Regular Meeting
February 8, 2022

1. CALL TO ORDER

The Board of Trustees of the Town of Bennett met in regular session on Tuesday, February 8, 2022 via hybrid meeting. Mayor Royce D. Pindell called the meeting to order at 7:00 p.m. The following persons were present upon the call of the roll:

Mayor: Royce D. Pindell

Trustees Present: Kevin Barden
Darvin Harrell
Whitney Oakley
Denice Smith
Donna Sus - *excused*
Larry Vittum

Staff Present: Trish Stiles, *Town Administrator*
Rachel Summers, *Deputy Town Administrator*
Taeler Houlberg, *Administrative Services Director*
Alison Belcher, *Communications and IT Director*
Steve Hebert, *Planning and Economic Development Manager*
Daymon Johnson, *Capital Projects Director*
Adam Meis, *IT and Communications Manager*
Dan Giroux, *Town Engineer*
Mike Heugh, *Town Traffic Engineer*
Melinda Culley, *Town Attorney*
Christina Hart, *Town Clerk*

Public Present: Kathy Smiley, Gina Burke, Shirl Reynolds, Chris McGranahan, John Vitella, Karen Henry, Jim Marshall, Eric Tuin, Cooper Raines, Tom Richardson, David Stockman, Flora Goodnight, Dan Goodnight, Nina Callow, Yvonne Reed, Karen Swartz, Gaylene Allen, Eileen Church, Deb Vance, Brenda Craig, Cam Kepler, Dennis Owens, Irma Ronquillo, Tony Carey

2. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Mayor Royce D. Pindell.

3. APPROVAL OF AGENDA

TRUSTEE VITTUM MOVED, MAYOR PRO TEM HARRELL SECONDED to move item #7 a. Bennett Food Bank Lease Agreement – Second Amendment to the first discussion item. The agenda was approved as modified. The voting was as follows:

YES: Harrell, Oakley, Pindell, Smith, Vittum, Barden

NO: None

EXCUSED: Sus

Mayor Royce D. Pindell declared the motion carried by unanimous vote.

4. **CONSENT AGENDA**

MAYOR PRO TEM HARRELL MOVED, TRUSTEE SMITH SECONDED to approve the consent agenda as presented.

YES: Oakley, Pindell, Smith, Vittum, Barden, Harrell

NO: None

EXCUSED: Sus

Mayor Royce D. Pindell declared the motion carried by unanimous vote.

A. **Action:** Approval of January 25, 2022 Regular Meeting Minutes

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

Tony Carey, 2997 Prosperity Court, Fredrick, Colorado, has worked with Trish Stiles, Town Administrator, on the BennT Water Creek Authority. Mr. Carey reported to the board Ms. Stiles is fabulous and empathic. Ms. Stiles possesses integrity, which is rare in municipal government. Ms. Stiles is highly valuable asset.

5. **REGULAR BUSINESS**

A. Action/ Discussion Items

1. **Bennett Food Bank Lease Agreement – Second Amendment**

Ordinance No. 736-22 – An Ordinance Approving a Second Amendment to Lease Agreement Between the Town and the Bennett Community Food Bank

Rachel Summers, Deputy Town Administrator, reported to the Board of Trustees, The Food Bank is a registered non-profit entity, with an average of ten community volunteers that help manage and operate a donation program for the residents along the I-70 corridor. The Bennett Food Bank has dispersed food from the community since the mid-1990s.

The Food Bank is funded on monetary donations and a minimal state disbursement of \$250 a month. All revenue is spent on food or essential supplies for the community. On average, the Bennett Food Bank will supply food or essentials to over 500 people monthly. The service is provided to residents living anywhere from Watkins to Agate and sometimes Kiowa.

The Food Bank receives an overwhelming amount of goods donations (bread, canned goods, frozen, eggs, etc.), bi-weekly. The food donations are primarily stored in the room on the south wall in the community room. Inside that room, there are shelving units, four freezers and one large refrigerator. Occasionally, they also store food in the refrigerator and

shelves within the kitchen when they have an overflow of donations. They are required by state law to have inspections and report to donation agencies monthly.

The Food Bank entered into the first amendment lease agreement in March 2017, stating that they may occupy the Community Center on the first and third Saturdays every month from 8:30 a.m. -10:30 a.m. and entirely occupy the room at the south wall of the main room for food supplies. The current lease set a negotiated flat amount of \$75 per month for the rental of the Community Center. This negotiated rate was based on the financial capacity of the Food Bank and well below the 2017 schedule of fee non-profit rate.

Due to the overwhelming number of families the Food Bank is now supporting, the non-profit is seeking to expand their rental time to reserve the first and third Fridays to **set up** for Saturday food distributions. This would amend the lease period to the first and third every month starting on Friday 8:30 a.m. to Saturday at 10:30 a.m.

According to the Town's fee schedule, a non-profit six-hour rental cost is \$125, and \$25 per hour thereafter. To reserve the proposed timeframe, the Food Bank rental charge would be for the complete occupancy of the community center space for a collective 16 hours a month on 2 Fridays and 8 hours a month on 2 Saturdays. An estimated \$600 rental fee would be assessed based on the fee schedule.

The Food Bank has not paid rent on its current lease since March 2020. Due to the unforeseen events of COVID, the Food Bank services were deemed essential and rental obligations were paused.

It is estimated over 12,000 pounds of food a month are distributed to residents of our community. On average supporting nearly 125 families with minimal means to eat or feed their children. Additionally, this non-profit company is supported solely by volunteer members who collectively dedicate over 1,000 hours a month of service. Furthermore, the Food Bank supports five County community service affiliate programs, where community services hours for the distribution services are considered certified by the courts.

In summary, it is the staff's assessment that the operations of the Food Bank are a crucial service to our community and should be considered an extension of the Town's essential functions. Therefore, staff would recommend the Town Board of Trustees forgive the rent owed by the Food Bank for the period of March 2020 through December 2021 and for all of 2022. As a way to compare the amount of rent forgiveness, staff based it on the current schedule of fees, which is \$7,200 annually.

Staff recommends that the Board of Trustees approve the Second Amendment to the Bennett Food Bank Lease Agreement, which includes the following amendments:

- Updates the description of the leased premises and expands the time period the Food Bank is allowed to use the Community Center.
- Changes the rental rate to reflect the fee set forth in the Bennett Schedule of Fees, but forgives rent for the period of March 2020 through December 2022.

- Authorizes the Food Bank to request rent forgiveness in the future if the Food Bank continues to provide distribution services to our community.

State statute provides that a lease with a term exceeding one year must be approved by ordinance. Therefore, an ordinance approving the Second Amendment has been prepared for the Board's consideration.

Flora Goodnight, Director of the Bennett Community Food Bank, thanked the Board of Trustees for their support. The Food Bank has seen a significant increase serving families and individuals since the COVID-19 pandemic. Ms. Goodnight thanked the food bank volunteers with whom distributions would not be possible. Since COVID-19, the only fund raising opportunity has been during Bennett Days. Annual insurance costs the food bank \$835. A \$250 donation was made to the VFW on behalf of the food bank for the use of the VFW during Bennett Days. The food bank offers community service to Adams, Arapahoe, Elbert, and Jefferson counties. Additionally the food bank instituted a new program called "Totes of Hope" twice a month. This program is specific to children.

Dan and Flora Goodnight have served families and individuals through the food bank for 27 years.

TRUSTEE VITUM MOVED, MAYOR PRO TEM HARRELL SECONDED to approve Ordinance No. 736-22 – An ordinance approving a second amendment to the lease agreement between the Town and the Bennett Community Food Bank. The voting was as follows:

YES:	Pindell, Smith, Vittum, Barden, Harrell, Oakley
NO:	None
EXCUSED:	Sus

Mayor Royce D. Pindell declared the motion passed unanimously.

Mayor Royce D. Pindell called for a recess at 8:09 p.m. The meeting resumed at 8:14 p.m.

B. Public Hearing

1. Case No. 21.15 Brunner Subdivision Final Plat

Resolution No. 902-22 – A Resolution Approving a Final Plat for the Brunner Subdivision

Mayor Royce D. Pindell called the matter of Case 21.15 Brunner Subdivision Final Plat to order. The public hearing was opened at 7:18 p.m.

Christina Hart, Town Clerk, stated that in accordance with Colorado State Statue, notice of the public hearing was properly posted and published in the Eastern Colorado News on January 7 and January 14, 2022. Legal #2558.

Steve Hebert, Planning and Economic Development Manager, reported to the Board of Trustees Case No. 21.15 is a proposed final plat for 87 single-family detached lots on 20.17 acres. The property is located on the south side of US Highway 36/East Colfax Avenue, just east of the SkyView subdivision. The property is zoned R-2 – Mid-Density Residential.

Access to the subdivision will be via East Colfax Avenue to the north and a second access to the south via a new Lark Sparrow Way into the Muegge Farms planning area, with a connection west to Penrith Road and east to S. 1st Street. An approximate one-acre tract is reserved in the middle of the subdivision for a future park.

Water service will be provided by the Town of Bennett.

Sanitary sewer service will be provided by the Town of Bennett.

Stormwater will be collected and conveyed as part of the Bennett Crossing stormwater system.

Access and traffic access to the north is via East Colfax Ave. with a right-in/right-out main entry. Access to the south will be via a new street, Lark Sparrow Way, which will connect to Civic Center Drive and other streets in the Muegge Farms development.

Fire and Rescue Bennett-Watkins Fire Rescue will provide service. The applicant shall meet directly with BWFR to review specific site and building plans to assure conformance with International Fire Code standards.

Gas, Electricity and Telecommunications Natural gas will be provided by Colorado Natural Gas, electricity by CORE Electric Cooperative and telecommunications by Eastern Slope Technologies (ESRTA).

The Municipal Code requires ten percent (10%) of the total land area contained within the subdivision to be dedicated to the Town for park land and other public facilities. Given the size of the subdivision, the public land dedication requirement is 2 acres.

The Bennett School District 29J has requested cash-in-lieu of land dedication, which will be payable pursuant to the Town of Bennett/School District IGA and the municipal code in effect at the time of building permit issuance or subdivision agreement.

APPLICANT/REPRESENTATIVE PRESENTATION

John Vitella, MGV 36 South Land Investments, LLC, reported to the Board, he and partner Jim Marshall have enjoyed working in the Town of Bennett. MGV Investments, LLC were also the applicant for the SkyView subdivision as well as involvement with the Muegge Farms development. Mr. Vitella and Karen Henry thanked the Board for their time.

TRUSTEE COMMENTS

Mayor Pro Tem Harrell asked if the speed limit on Colfax Avenue would be lowered with the expectation of the volume of increased traffic. Mike Heugh, Town Traffic Engineer, reported a traffic speed study could be conducted.

Trustee Vittum and Trustee Smith expressed concerns that the right-in/right-out access could present difficulties for the Bennett-Watkins Fire Rescue to access/enter the subdivision.

PUBLIC COMMENTS

Ms. Shirl (Reynolds) Millard would like to speak to someone about selling her property, which is adjacent to the future Brunner subdivision.

TRUSTEE COMMENTS

Trustee Smith is concerned about the “pork chop” right-in/right-out access from the subdivision. It could increase illegal turns in and out of the subdivision. The “pork chop” design could affect potential school bus service to the development. Mr. Hebert reported the design comes from CDOT (Colorado Department of Transportation).

The public hearing was closed at 7:52 p.m.

TRUSTEE VITTUM MOVED, MAYOR PRO TEM HARRELL SECONDED to approve Resolution No. 902-22 – A resolution approving a final plat for the Brunner Subdivision with the following conditions of approval:

1. The subdivision agreement shall include a provision committing the subdivider to build and maintain a second access to the south from the subdivision, in a time, place and manner acceptable to the Town.
2. The plat should be amended to reflect Tracts I and J are to be vacated and owned and maintained by the metropolitan district or the homeowner’s association.
3. Before recording the plat, the applicant shall update plat notes related to Tracts, easements and maintenance in a manner directed by the Town Engineer and make other minor modifications as directed by Town Staff, Engineer and Town Attorney.

The voting was as follows:

YES:	Vittum, Barden, Harrell, Pindell
NO:	Oakley, Smith
EXCUSED:	Sus

Mayor Royce D. Pindell declared the motion passed four aye’s to two no’s.

2. Case No. 21.21 Bennett Avenue Townhomes Subdivision Final Plat

Resolution No. 903-22 – A Resolution Approving a Final Plat for Bennett Avenue Townhomes

Mayor Royce D. Pindell called the matter of Case 21.21 Bennett Avenue Townhomes Subdivision Final Plat to order. The public hearing was opened at 8:18 p.m.

Christina Hart, Town Clerk, stated that in accordance with Colorado State Statue, notice of the public hearing was properly posted and published in the Eastern Colorado News on January 7 and January 14, 2022. Legal #2560.

Steve Hebert, Planning and Economic Development Manager reported to the Board of Trustees, Case No. 21.21 is a proposed final plat for 19 townhome lots on 1.5 acres located at 300 Bennett Avenue, immediately east of the Horizon Condominiums. The property was annexed into the Town of Bennett in June 2020. The Board of Trustees approved R-3 – High Density Residential zoning on March 9, 2021.

Access to the private drive on the west side will be via an existing 30-foot town owned right-of-way. Tract A will be for parking; Tract B is the private access road and utility easement; and Tract C is a utility and maintenance access easement.

Water service will be provided by the Town of Bennett.

Sanitary sewer service will be provided by the Town of Bennett.

Stormwater will be collected and conveyed via on-site stormwater system improvements, using the adjacent Bennett Crossing stormwater detention pond.

Access and traffic is from Bennett Avenue to an interior private drive.

Fire and Rescue Bennett-Watkins Fire Rescue will provide service. The applicant shall meet directly with BWFR to review specific site and building plans to assure conformance with International Fire Code standards.

Gas, Electricity and Telecommunications Natural gas will be provided by Colorado Natural Gas, electricity by CORE Electric Cooperative and telecommunications by Eastern Slope Technologies (ESRTA).

Park Land and Public Facilities

The Municipal Code requires ten percent (10%) of the total land area contained within the subdivision to be dedicated to the Town for park land and other public facilities. Ten percent of the 1.5 acres would be 0.15 acres, or 6,534 sq. ft. of land. The Town will require that this be satisfied by cash-in-lieu, which will be determined at the time of subdivision agreement and will eventually be presented to and approved by the Board of Trustees.

Bennett School District 29J

The Bennett School District 29J has requested cash-in-lieu of land dedication, which will be payable pursuant to the Town of Bennett/School District IGA and the municipal code in effect at the time of building permit issuance.

There were no public comments presented.

The public hearing was closed at 8:40 p.m.

TRUSTEE OAKLEY MOVED, TRUSTEE VITUM SECONDED to approve Resolution No. 903-22 – A resolution approving a final plat for Bennett Avenue Townhomes subject to the following conditions:

1. Update plat notes related to easements and maintenance in a manner directed by

the Town Engineer.

2. Make other minor modifications as directed by Town Staff, Engineer and Town Attorney.

The voting was as follows:

YES: Smith, Vittum, Barden, Harrell, Oakley, Pindell

NO: None

EXCUSED: Sus

Mayor Royce D. Pindell declared the motion passed unanimously.

3. Cancellation of April 5, 2022 Election

Resolution No. 904-22 – A Resolution Instructing the Town Clerk to Cancel the April 5, 2022 Election and Declaring Candidates Elected

Christina Hart, Town Clerk, reported to the Board of Trustees, In April 2022 the Bennett Board of Trustees would have three vacant positions for the office of Trustee for a four-year term. The qualifications to run for the Trustee office are as follows:

- Shall be a resident of the Town for a period of at least twelve consecutive months immediately preceding the date of the election
- Shall be a registered elector
- Shall be 18 years of age or older
- Shall be a U.S. citizen; and
- Shall maintain residence for the duration of the term.

Nomination petitions were available to eligible electors beginning on January 4, 2022. The deadline to return the petitions was January 24, 2022. The deadline for a candidate to withdraw a petition of nomination was on January 31, 2022.

The Clerk's office received four petitions for the office of Trustee. All petitioners met the qualifications outlined above. The Colorado Secretary of State provided a list of registered electors for the signature verification process. All names, addresses and signatures on the petitions were satisfied.

The Clerk's office did receive one withdrawal from nomination on January 31, 2022, and no write-in candidate affidavits were received. Per the Bennett Municipal Code Section 2-1-30:

If the only matter before the voters is the election of persons to office and if, at the close of business on the sixty-fourth day before the election, there are not more candidates than offices to be filled at such election, including candidates filing affidavits of intent as set forth in Section 2-1-20, the Town Clerk shall certify such fact to the Board of Trustees. The Board of Trustees, by resolution, shall instruct the Town Clerk to cancel the election, and shall declare the candidates elected. All candidates in such cancelled election shall be deemed elected.

Due to the withdrawal of nomination on January 31, there are not more candidates than offices to be filled.

Staff recommends the Board of Trustees cancel the April 5, 2022, election and elect the following persons to the office of Trustee for a four-year term ending in April 2026.

- Kevin Barden
- Steve Dambroski
- Darvin Harrell

If elected by the Board the new Trustees will take the oath of office during the April 12, 2022, board meeting.

TRUSTEE SMITH MOVED, TRUSTEE VITTUM SECONDED to approve Resolution No. 904-22 – A resolution instructing the Town Clerk to cancel the April 5, 2022 election and declare candidates Kevin Barden, Steve Dambroski, and Darvin Harrell elected to a four-year term for the office of Trustee ending in April 2026. The voting was as follows:

YES: Vittum, Barden, Harrell, Oakley, Pindell, Smith

NO: None

EXCUSED: Sus

Mayor Royce D. Pindell declared the motion passed unanimously.

4. Request for Proposal (RFP) 22-001 – Construction of Bennett Laramie-Fox Hills Aquifer Well LFH-14

Daymon Johnson, Capital Projects Director, reported to the Board of Trustees, reported to the Board, the Town solicited written proposals from interested contractors for the construction of Well Laramie- Fox Hills Well (LFH) 14, in accordance with specifications from Jehn Water Consultants, Inc.

The Scope of Work is for the construction, completion, development and pump testing of a vertically drilled water well suitable to provide municipal water to the Town.

The RFP, 22-001, was released to the public on Monday, January 10, 2022. The RFP was open for public bid until Monday, January 31, 2022 at 2:00 pm. The RFP included instructions for bidders to procure drawings and specifications directly from Jehn Water Consultants, Inc., and outlined thoroughly the bid requirements.

The Town received two qualifying bids from Layne and Hydro Resources. The Bid Comparison Table, completed by Jehn Water Consultants, is attached.

Town staff asked that the drilling bid include two options in regard to the access road into the site. After review of the bid costs, staff elected to go with the permanent all-weather access option that will provide the east-west access into the site, and will remain in place for further use as this site develops.

The total bid costs provided by Layne and Hydro Resources are summarized below:

Company	Bid Total with Permanent All-Weather Access Option
---------	--

Hydro Resources	\$665,700.00
Layne	\$851,324.00

After fully reviewing the bid documents from both Hydro Resources and Layne, both Town Staff and Jehn Water Consultants are comfortable recommending that we proceed with issuing the Notice of Award and completing the drilling Contract Agreement with the low bidder, Hydro Resources.

Town staff and Jehn Water Consultants have a working history with Hydro Resources. Hydro Resources was the contractor that completed the replacement wells De-6, A-6 and LFH-3 in 2015, and new well LFH-6 in 2020. The Town has significant past and relevant experience with Hydro Resources, and there is a great deal of comfort in their firm's ability to deliver a quality project both efficiently and on budget.

Hydro Resources has communicated with Jehn Water Consultants that they are available to start work immediately once the Notice to Proceed is provided. The contract time will be 60 days from the Notice to Proceed.

TRUSTEE SMITH MOVED, MAYOR PRO TEM HARRELL SECONDED to authorize the Mayor and the Town of Bennett to enter into a standard town contract agreement with Hydro Resources, Inc. in an amount not to exceed \$665,700 for contractor services to complete the construction, completion, development and pump testing of the new Laramie Fox Hills Well 14 vertical well.

YES: Barden, Harrell, Oakley, Pindell, Smith, Vittum

NO: None

EXCUSED: Sus

Mayor Royce D. Pindell declared the motion passed unanimously.

6. TOWN ADMINISTRATOR REPORT

Trish Stiles, Town Administrator, reported on the following:

- Met with CDOT to begin discussions and brainstorm for applications for the upcoming TIP cycle and approach the sub-regional forums. Ms. Stiles learned that unless the project is adopted in the fiscal plan the Town is not allowed to ask for funding. Ms. Stiles has reached out to DRCOG for a better understanding. Adams County did submit the project, however, per DRCOG staff the application did not score well.
- Met with Alyssa Reese, Interim Town Manager, regarding uses of facilities. The next allocation of CARES funding may concentrate on infrastructure.
- Board orientation training will be on April 7, 2022 from 11:00 a.m. – 2:00 p.m.

7. TRUSTEE COMMENTS AND COMMITTEE REPORTS

Larry Vittum

Trustee Vittum reported on the following:

- Attended the Adams County Transportation Forum virtual meeting with Ms. Stiles. Met with Doug Rex and expressed on behalf of the Town the disappointment of the TIP program. The basis of desire is to protect the Bennett citizens. Adams County presented the project, which in turn did not provide a full voice from the Town of Bennett and its residents.

Darvin Harrell

Mayor Pro Tem Darvin Harrell reported on the following:

- Citizens voiced their concern during the collection of signatures for the nomination petition. Some of those items:
 - Cars parking on the street with license plates not registered to the vehicle.
 - Residents are concerned with the rate of growth.

Whitney Oakley

Trustee Oakley reported on the following:

- Trustee Oakley and Trustee Smith have recommendations as to the review process for the Town Administrator:
 - Hire a consultant to perform the review process
 - Include a staff survey
 - Get started earlier, better organization making a better review process to provide the level of respect Ms. Stiles review deserves.

Mayor Royce D. Pindell called for a recess at 9:42 p.m. The meeting resumed at 9:55 p.m.

MAYOR PRO TEM HARRELL MOVED, TRUSTEE VITNUM SECONDED to extend the meeting past 10:00 p.m. The meeting was adjourned at 9:35 p.m. Voting was as follows:

YES:	Pindell, Smith, Vitnum, Barden, Harrell, Oakley
NO:	None
EXCUSED:	Sus

Mayor Royce D. Pindell declared the motion carried by unanimous vote.

8. EXECUTIVE SESSION

TRUSTEE OAKLEY MOVED, TRUSTEE VITNUM SECONDED to go into executive session for (1) for discussion of a personnel matter under C.R.S. Section 24-6-402(2)(f) and not involving; any specific employees who have requested discussion of the matter in open session; any member of this body or any elected official; the appointment of any person to fill an office of this body or of an elected official; or personnel policies that do not require the discussion of matters personal to particular employees; and (2) for the purpose of determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and/or instructing negotiators under C.R.S. Section 24-6-402(4)(e); Town Administrator Performance Review and Contract; Voting was as follows:

YES:	Oakley, Pindell, Smith, Vitnum, Barden, Harrell
NO:	None
EXCUSED:	Sus

Mayor Royce D. Pindell declared the motion carried by unanimous vote.

The Board went into executive session at 10:01 p.m.

The Board came out of executive session at 12:20 a.m. Mayor Royce D. Pindell announced that the Board has been in executive and the following person participated via hybrid in that session: Mayor Royce D. Pindell, Trish Stiles, Trustee Vitnum, Trustee Oakley, Melinda Culley, Trustee Smith, Trustee Barden, and Mayor Pro Tem Harrell. Mayor Royce D. Pindell asked if there were any matters not included in the motion for an executive session or violations of the Open Meetings Law, and if so, that these concern be stated for the record. No concerns were presented.

9. ACTION/DISCUSSION

A. Town Administrator Yearly Contract Amendment No. 8

The Board of Trustees approved the 8th amended contract for the Town Administrator during the February 8, 2022 board meeting. The cumulative score for Trish Stiles, Town Administrator 2021 evaluation arrived at 8.85%.

TRUSTEE VITTUM MOVED, MAYOR PRO TEM HARRELL SECONDED to approve of initiating a new contract with the Town Administrator, Trish Stiles, with a compensation package to include a base salary of \$150,000 plus an additional bonus of \$40,000 plus a standard benefits package to carry forth from the previous year. The voting was as follows:

YES:	Pindell, Smith, Vittum, Barden, Harrell, Oakley
NO:	None
EXCUSED:	Sus

10. ADJOURNMENT

TRUSTEE SMITH MOVED, TRUSTEE VITTUM SECONDED to adjourn the meeting. The meeting was adjourned at 12:35 a.m. Voting was as follows:

YES:	Smith, Vittum, Barden, Harrell, Oakley, Pindell
NO:	None
EXCUSED:	Sus

Mayor Royce D. Pindell declared the motion carried by unanimous vote.

Royce D. Pindell, Mayor

Christina Hart, Town Clerk

**QUASI-JUDICIAL PUBLIC HEARING SCRIPT
BOARD OF TRUSTEES**

MAYOR: I will now open the public hearing on the following application: An application for **Case No. 21.26 Bennett Ranch Filing 2 Final Plat**.

The purpose of the hearing is to provide a public forum for all interested parties who wish to comment on an application before the Board of Trustees. If you wish to speak please write your name and address on the sign-up sheet or in the chat box and you will be called on.

The Procedure for the public hearing will be as follows:

FIRST, there will be a presentation by the Town staff.

NEXT, we will have a presentation by the applicant.

After these two presentations we will allow people who signed up to speak for up to 3 minutes each. Please **DO NOT REPEAT** points made by others. It is fine to say, "I agree with the previous speaker's comments". Please direct your comments to the Trustees, not the applicant or Town staff.

After receiving public comments, we will allow the applicant an opportunity to respond.

NEXT, the Trustees may ask questions of anyone who testified.

I will then close the public hearing and no further testimony or other evidence will be received. The Trustees will discuss the matter and may take some kind of action.

Public hearings are recorded for the public record. All testimony must be presented, after you give your full name and address.

MAYOR: Do we have proper notification?

[Town Clerk to confirm on record notice has been provided]

Do any Trustees have any disclosures?

[Trustees to disclose conflicts of interests, ex parte contacts, etc]

Town staff, please introduce the applicant and provide your staff report.

[Staff presentation]

Will the applicant or the applicant's representative present the application?

[Applicant presentation]

Do any of the Trustees have questions of the applicant or Town staff?

[Question and Answer]

MAYOR: I will now open the public comment portion of the public hearing. For those wishing to speak, please clearly state your name and address for the record.

Page 16

Has anyone signed up to speak at this public hearing?

[If more than one person has signed in, call them in order.]

Is there any interested party in the audience that has not signed up but who wishes to speak regarding the application?

[Additional public comment]

If there is no more public comment, I will now close the public comment portion of the public hearing.

MAYOR: Does the applicant wish to respond to any of the comments?

[Opportunity for applicant to provide any rebuttal evidence]

MAYOR: Before we turn to Trustee questions and deliberation, I want to state that the documents included within the record for this public hearing include all application materials submitted by the applicant; all materials included in the Trustee packets; any PowerPoint or other presentations given tonight; all written referral and public comments received regarding the application; the public comment sign-up sheet; the public posting log and photographs of the notice, and the Town's subdivision and zoning ordinances and other applicable regulations. Does anyone have any objection to inclusion of these items in the record?

MAYOR: I will now close the public hearing and the Trustees will deliberate on the evidence presented. During deliberations, Trustees may ask questions of Town staff, but no further public comment or other testimony or evidence will be received.

Who would like to begin?

Who is next?

Any other questions or comments

[If anyone believes the applicable criteria have not been met, then please explain why so we have those reasons for the record.]

MAYOR: We have a draft Resolution in front of us and I would entertain a motion.

May we have a Roll-Call vote?

Motion carries/fails.

STAFF REPORT



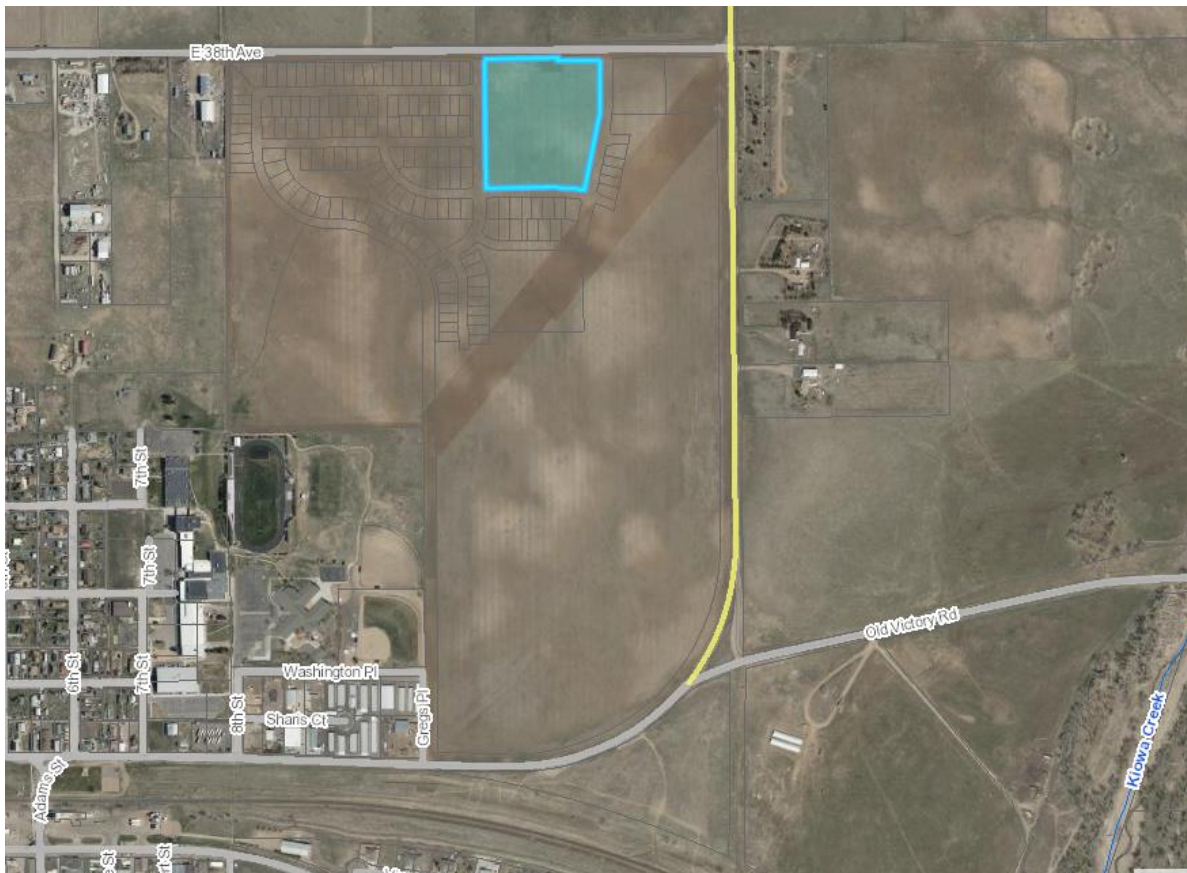
welcome neighbors.

TO: Mayor and Town of Bennett Board of Trustees
FROM: Steve Hebert, Planning and Economic Development Manager
DATE: February 22, 2022
SUBJECT: Case No. 21.26 – Bennett Ranch Filing No. 2 Final Plat

Applicant/Representative(s): LGI Homes, Kacy Flemons; Owner's Representatives – Trey Farrell, Kimley-Horn
Location: Approximately 600 feet west of the East 38th Avenue/Colorado Highway 79 (Kiowa-Bennett Road) intersection
Purpose: Final Plat for 84 Townhome Lots

Background

Case No. 21.26 is a proposed final plat for 84 townhome lots on 8.918 acres in Bennett Ranch. The property was originally platted as Tract B of Bennett Ranch Filing 1. It is located on the south side of East 38th Avenue approximately 600 feet west of the East 38th Avenue/Colorado Highway 79 (Kiowa-Bennett Road) intersection. The property is zoned R-3 - High Density Residential.



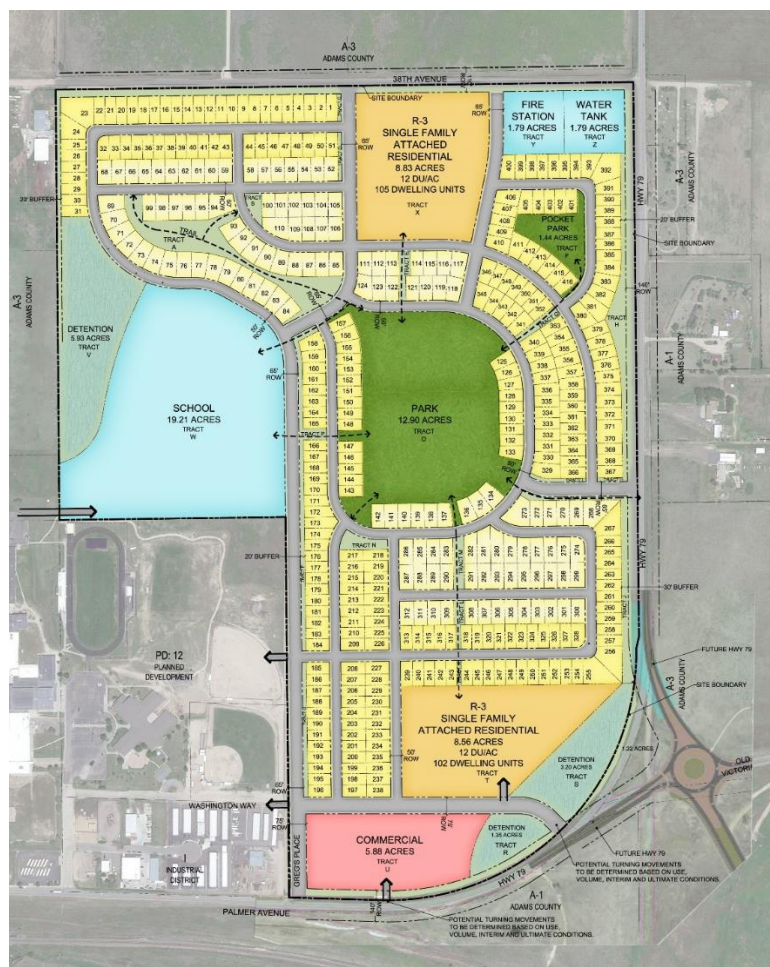
Site Photo

Looking Southwest at Bennett Ranch Filing 1 and Filing 2 Overlot Grading



Previous Sketch Plan

The Planning and Zoning Commission reviewed a previous sketch plan in 2019. (See below.) The Bennett Ranch Filing No. 2 Final Plat is for the orange parcel in the north central part of the image.



Proposed Lot Layout

The map below shows the proposed lot layout and street configuration.



Access to the townhomes will be via a public street (Pintabian Drive, in dark grey), and a series of private driveways and alleys (light grey). In addition, several tracts are set aside as open space tracts (green) that will eventually accommodate landscaping and pedestrian connections. See the final plat document in the packet for more details on lot, right-of-way and easement locations and dimensions.

Zoning and Land Use Regulations

The map and table below show the zoning of the surrounding area, including a mix of R-2 and P – Public zone districts.



Direction	Zone District	Current Land Use
North	A-3 in Adams County	Agricultural
East	P – Public, R-2 – Mid Density Residential	Vacant (future fire station)
South	R-2 – Mid Density Residential	Residential under construction
West	R-2 – Mid Density Residential	Residential under construction

The table below summarizes the minimum and maximum standards in the R-3 zone district and how the proposed subdivision plat compares. Most of the standards will be enforced at the time of site plan and building permit.

Standard	R-3 Zone District	Proposed
Min. Lot Area/Dwelling Unit	2,400 sq. ft.	2,400 sq. ft.
Min. Lot Width	25 feet for townhomes	25 ft.
Max. Lot Coverage	75%	TBD
Minimum Floor Area/Dwelling Unit	600 sq. ft.	TBD
Minimum Front Yard Setback (Principal Structure)	25 feet	TBD
Min. Side Yard Setback (Principal Structure)	5 feet for townhomes	TBD
Min. Rear Yard Setback (Principal Structure)	20 feet	TBD
Maximum Height (Principal Structure)	40 feet	TBD

Public Services and Utilities

Water

Water service will be provided by the Town of Bennett. See the Town Engineer's memorandum.

Sanitary Sewer

Sanitary sewer service will be provided by the Town of Bennett. See the Town Engineer's memorandum.

Stormwater Management

Stormwater will be accommodated by the Bennett Ranch regional stormwater system. See the Town Engineer's memorandum.

Access and Traffic

Access will be from a newly constructed Pintabian Drive, which will connect to the future Bennett Ranch Boulevard and Appaloosa Avenue, and then to E. 38th Avenue.

Fire and Rescue

Bennett-Watkins Fire Rescue (BWFR) will provide service. The applicant should meet directly with BWFR to review specific site and building plans to assure conformance with International Fire Code standards. A future fire station is planned for the property immediately east of this project. See the fire district's response.

Gas, Electricity and Telecommunications

Natural gas will be provided by Colorado Natural Gas, electricity by CORE Electric Cooperative and telecommunications by Eastern Slope Technologies (ESRTA) or Comcast.

Public Land Dedication Requirements

Park Land and Public Facilities

The Municipal Code requires ten percent (10%) of the total land area contained within the subdivision to be dedicated to the Town for park land and other public facilities. Most of the ten percent requirement has been satisfied by previous public land dedications for parks, the fire station site and a new town well and water storage tank site. Staff will evaluate the proposed open space tracts for additional credit at the time of site plan review.

Bennett School District 29J

The Bennett School District 29J has requested cash-in-lieu of land dedication, which will be payable pursuant to the Town of Bennett/School District IGA and the municipal code in effect at the time of building permit issuance or subdivision agreement.

Staff Analysis and Findings

Per Section 16-4-380 of the Bennett Municipal Code, the Town shall use the following criteria to evaluate the applicant's final plat application:

- A. The final plat incorporates recommended changes, modifications and conditions attached to the sketch plan unless otherwise approved by the Planning Commission.

Staff Finding: The Final Plat is consistent with the previous sketch plan reviewed by the Planning and Zoning Commission in 2019.

- B. All applicable technical standards in accordance with this Chapter and adopted Town documents have been met.
 - 1. To establish appropriate standards for subdivision design that will:
 - a. Encourage the development of sound, economical and stable neighborhoods and healthy living environments, in conformance with the goals and policies of the Comprehensive Plan.
 - b. Provide lots of adequate size, configuration and design for the purpose for which they are intended to be used.
 - c. Promote superior design and design flexibility.
 - d. Preserve the significant natural features and environmental quality of the Town.
 - e. Guide the physical development of the Town in ways that complement the Town's character and culture.
 - f. Promote a cohesive sense of community among new and current residents, precluding neighborhood design or restrictions that in any way isolate any neighborhood from the rest of the community.
 - g. Provide complete and accurate public land records.

Staff Finding: The proposed final plat will accommodate new development that meets the standards of good subdivision design.

- 2. To establish standards for utilities and other public services that will:
 - a. Provide an efficient, adequate and economical supply of utilities and services to land proposed for development without adverse effects to property that is currently served.
 - b. Ensure that adequate stormwater drainage, sewage disposal, water supply and other utilities, services and improvements needed as a consequence of the subdivision of the land are provided.
 - c. Provide for the reasonable extension of utilities and services to other lands that may be developed in the future.

- d. Provide the equitable distribution of the cost of new and expanded public services needed to support new land development.

Staff Finding: The proposed final plat, future subdivision agreement and construction documents will accommodate extension of utilities and public services to serve new residential neighborhood.

3. To ensure the provision of adequate and safe traffic circulation that will:
 - a. Minimize traffic hazards through appropriate street design, providing safe and convenient vehicular and pedestrian traffic circulation systems.
 - b. Provide adequate vehicular access to abutting properties.
 - c. Provide streets of adequate capacity and appropriate design and function.

Staff Finding: The proposed public street and the private driveways and alleys will accommodate circulation for residents, visitors and emergency vehicles.

4. To ensure adequate public facilities that will:
 - a. Provide for the recreational, cultural, educational and other public facility needs of the community.
 - b. Facilitate effective law enforcement and fire protection.

Staff Finding: To the extent previous school land dedication does not satisfy the requirement for this plat, the applicant will be required to pay cash-in-lieu for school land dedication, as well as the standard Town impact fees for public facilities. The proposed final plat provides a series of internal and external sidewalks that accommodate pedestrian connections to the neighborhood and the surrounding community.

5. To contribute to the proper development of the community in accordance with the goals and policies of the Comprehensive Plan as it may be updated from time to time.

Staff Finding: The proposed plat is consistent with the principles in the 2021 Town of Bennett Comprehensive Plan related to:

- Mixed land uses
- Access to healthy living
- Access to open space, trails and parks
- Contiguous development
- A variety of transportation choices

C. Compliance with Zoning Regulations

Staff Finding: All lots meet the standards in R-3 – High Density Residential District, as noted above.

Referral Agency Review and Comments

The proposed Bennett Ranch Filing 2 Final Plat was sent to several referral agencies for comment, including:

1. Town Planning
2. Town Engineer
3. Town Traffic Engineer
4. Town Attorney

5. Bennett-Watkins Fire Rescue (BWFR)
6. CORE Electric Cooperative (IREA)
7. Colorado Natural Gas (CNG)
8. Bennett School District 29J

Each of the agencies had comments or recommendations that are either reflected on the final plat document or will be addressed at later stages of the review process, e.g. site plan or building permit. General cleanup of the document to include all agency comments will be completed before recording.

Public Comment

Notice of the January 24, 2022, Planning and Zoning Commission hearing and the February 22, 2022, Board of Trustees hearing was published in the Eastern Colorado News, posted on the subject property and sent to all property owners within 300 feet of the property. No comments, other than those from the referral agencies, have been received to date.

Planning and Zoning Commission Recommendation

The Planning and Zoning Commission reviewed this subdivision plat on January 24, 2022, and adopted Resolution No. 2022-03 recommending approval of the Bennett Ranch Filing No. 2 Final Plat.

Staff Recommendation

Staff finds the proposed final plat is in compliance with the Subdivision Regulations in Chapter 16, Article IV of the Bennett Municipal Code. Staff also finds the plat has been processed according to Section 16-4-360 and meets the approval criteria in 16-4-380. Based upon these findings, staff recommends the Board of Trustees adopt Resolution 905-22, approving Case No. 21.26 – Bennett Ranch Filing No. 2, with the following conditions:

Before recording the final plat, the applicant shall:

1. Update plat notes related to easements and maintenance in a manner directed by the Town Engineer.
2. Make other minor modifications as directed by Town Staff, Engineer and Town Attorney.

Attachments

1. Staff PowerPoint Presentation (PDF)
2. Land Use Application
3. Letter of Intent/Narrative
4. Bennett Ranch Filing No. 2 Final Plat
5. Combined Staff and Referral Agency Comments
6. Bennett Ranch Traffic Study
7. Planning and Zoning Commission Resolution No. 2022-03
8. Resolution No. 905-22



Case No. 21.26 Bennett Ranch Filing 2 Final Plat

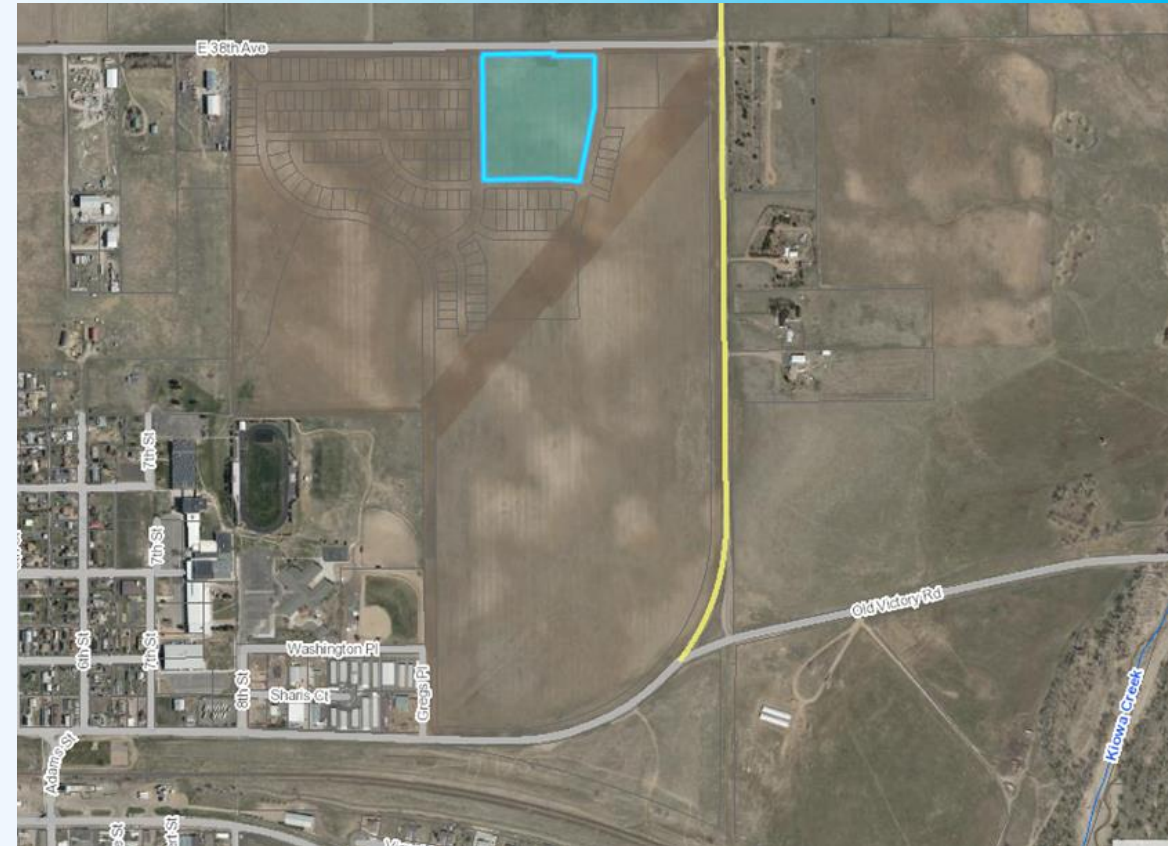
Town of Bennett Board of Trustees

February 22, 2022

Steve Hebert, Planning & Economic Development Manager

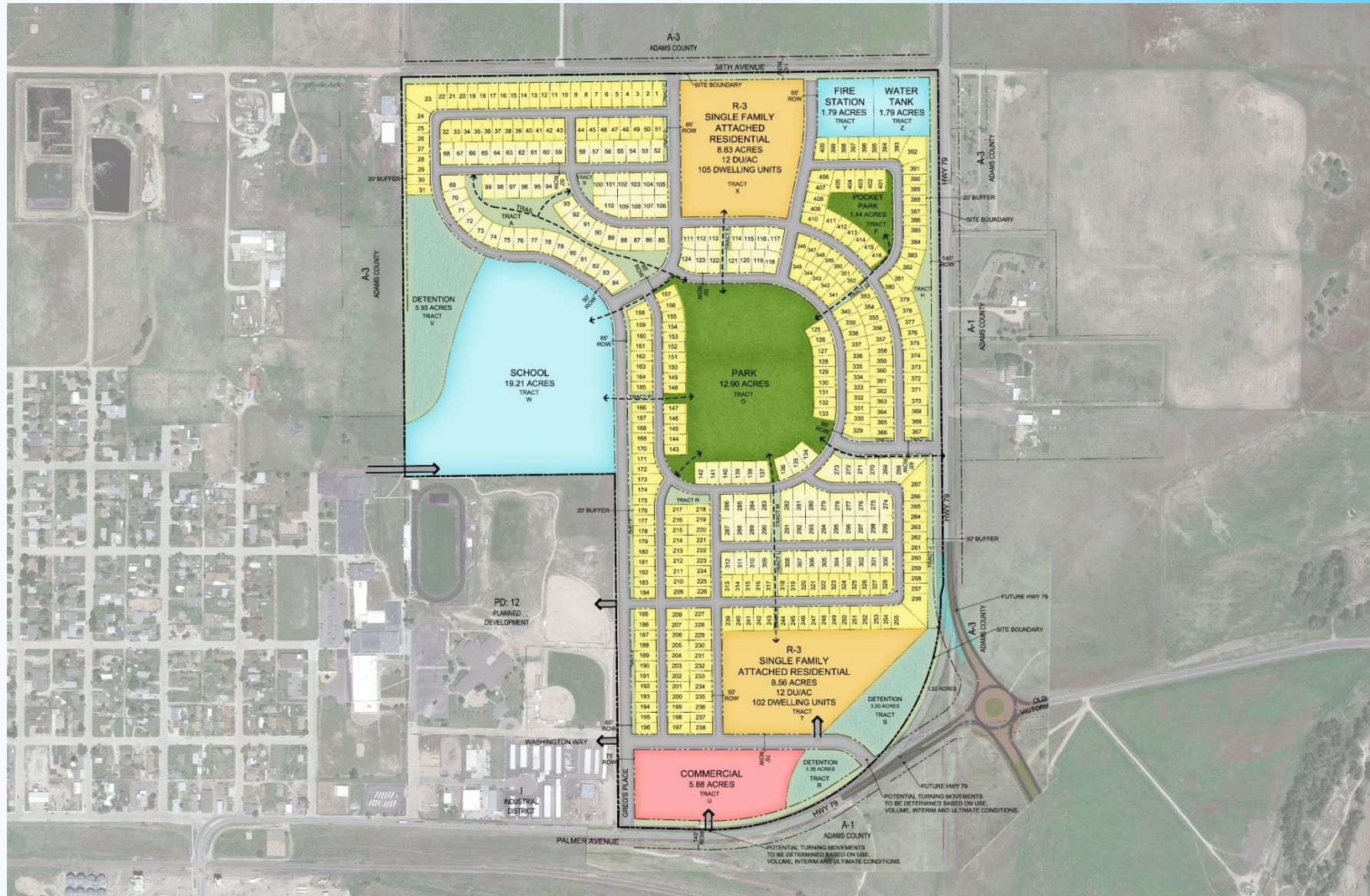
Proposed Final Plat

- 8.9 Acres
- Zoned R-3 – High Density Residential
- Subdivide to create 84 lots for attached townhomes
- 2,400 sq. ft. minimum lot size
- Internal public street and private alleys

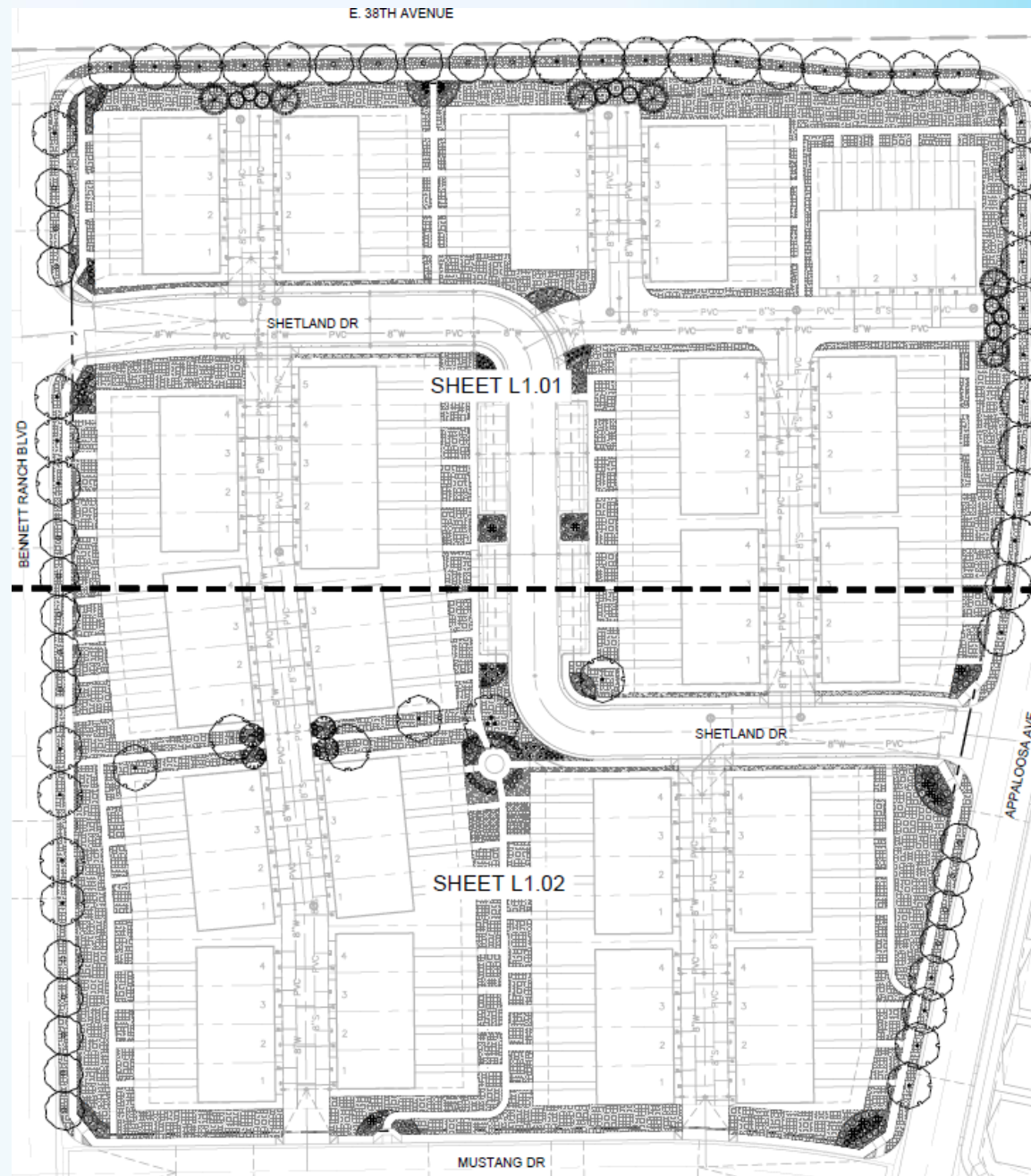


Bennett Ranch Sketch Plan

Reviewed by the Planning and Zoning Commission in 2019







Availability of Public Infrastructure

- Access – E. 38th Avenue to Bennett Ranch Blvd. or Appaloosa Ave.
- Water and Sewer – Town of Bennett
- Stormwater – Regional Bennett Ranch Stormwater System
- Fire Protection – Bennett-Watkins Fire Rescue
- Law Enforcement – Adams County Sheriff
- Electricity – CORE Electric Cooperative
- Natural Gas – Colorado Natural Gas
- Telecom – Eastern Slope Technologies
- Bennett School District - Cash-in-lieu

Staff Findings on Case No. 21.26

Per Section 16-4-380 of the Bennett Municipal Code, the Town shall use the following criteria to evaluate the applicant's final plat application:

- Generally consistent with the Sketch Plan, with updates and improvements.
- All applicable technical standards in accordance with the Subdivision Regulations and adopted Town documents will be met.
- The proposed lot configuration will accommodate new development that meets the standards of good subdivision design.
- The final plat document will accommodate extension of utilities and public services to serve future development.
- Public facilities include pedestrian connections to the Bennett Ranch community.
- All lots meet the standards of R-3 High Density Residential zone district.

Planning and Zoning Commission Recommendation

On January 24, 2022, the Planning and Zoning Commission adopted Resolution No. 2022-03 recommending approval of the Bennett Ranch Filing No. 2 Final Plat.

Staff Recommendation

Staff recommends the Board of Trustees adopt Resolution No. 905-22 approving the Bennett Ranch Filing 2 Final Plat, with the following conditions:

Before recording the final plat, the applicant shall:

1. Update plat notes related to easements and maintenance in a manner directed by the Town Engineer
2. Make other minor modifications as directed by Town Staff, Town Engineer and Town Attorney.

(See Draft Resolution)

Town of Bennett Land Use Application Form

TO BE COMPLETED BY APPLICANT

Application Type:				Other _____			
Primary Contact Name:							
Name of Firm:							
Address:							
City:			State:		Zip:		Phone:
Email:							
Owner Name:							
Address:							
City:			State:		Zip:		Phone:
Email:							
Mineral Estate Holder/Lease:							
Name of Firm:							
Address:							
City:			State:		Zip:		Phone:
Parcel#:				Subdivision Name:			
Site Address:							
Nearest Major Intersection:							
Legal Description:							
Current Zoning:					Proposed # lots/units:		
Total Acreage:					Gross Floor Area:		
Proposed Gross Densities (du/ac):							
Additional Notes:							

All Submittal Requirements must accompany this application. All applicable fees must be paid at the time of application. Any extraordinary cost incurred by the Town of Bennett in reviewing and processing this application is the responsibility of the applicant.

An executed cost agreement must be attached to this application pursuant to Sec. 16-1-325 of the Bennett Municipal Code.

I understand this is an application only, it must be approved by the Town, and any required building permits must be obtained before the property can be used in accordance with the request. I hereby acknowledge all of the above information is correct.

Applicant's Signature: Timothy Bruggman Date: _____

Bennett Ranch

**Bennett, Colorado | Northern Townhomes Final Plat Application
July 2021**

Letter of Intent

The subject property is located along the south western corner of State Highway 79 (Kiowa-Bennett Road) and 38th Avenue. Situated east of Bennett High School and Bennett Middle School, this proposed neighborhood will provide housing options within walking distance to the schools and nearby amenities within the Town of Bennett.

It is intended that the Bennett Ranch Subdivision be a well-connected neighborhood of single-family detached and attached residences with a series of trail connections which tie into a centralized Community Park. The Northern Townhomes site is approximately 8.9 acres and is planned for a total of 84 single-family attached homes (9.43 du/ac). The single-family detached homes have a typical lot size of approx. 25-feet wide by 96-feet in depth with variations throughout the site. The site is planned in accordance to the R-3 (High-Density Residential) Zone District. The proposed neighborhood will focus on providing quality common areas, landscape buffers, and trail corridors. Landscaping will be incorporated along all perimeter streets as well as enhanced entryways to accentuate the “front door” of the neighborhood.

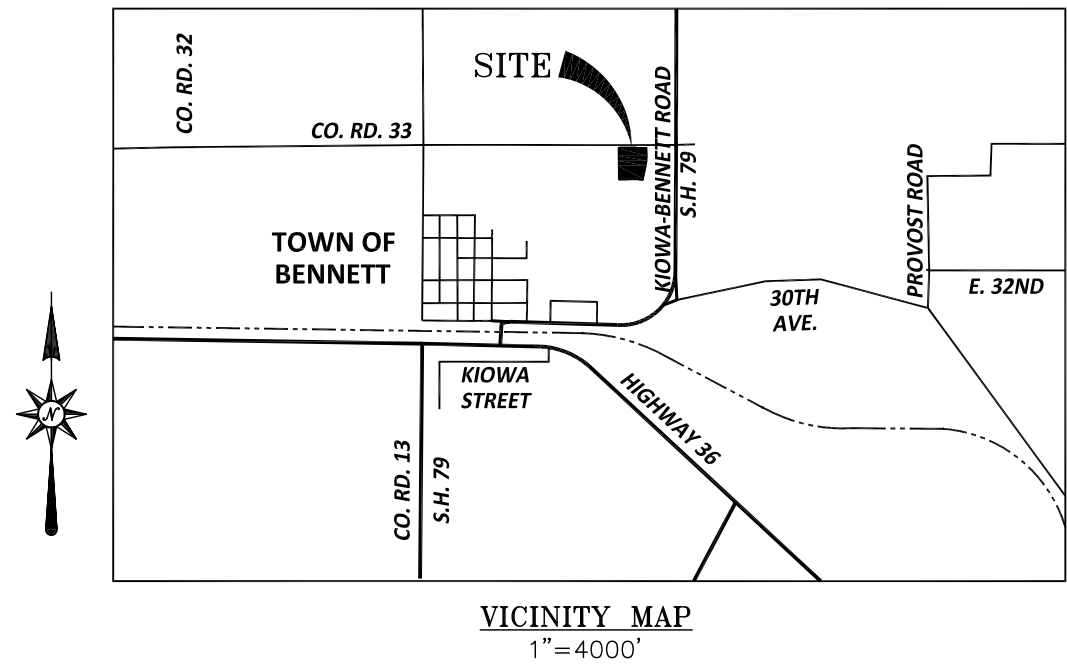
Primary vehicular access to the neighborhood will be from E. 38th Avenue. An Internal local street with attached alleys will provide access to residences.

Community design elements include a centralized Community Park with off-street parking, connecting open space/trail corridors, vehicular and pedestrian scaled lighting, and street furniture to contribute to providing a high-quality neighborhood experience. The Community Park will provide programming elements and pedestrian scaled amenities to increase activity within the Park.

Pedestrian and bicycle access will be provided along the internal street connections to help link neighborhood amenities to other developed areas within the Town. Trail linkages will also be provided within the Park and throughout the site to enhance walkability to Bennett High School and Bennett Middle School.

The intent of the architecture within Bennett Ranch is to provide a variety of quality housing options, colors, and architectural designs to complement the surrounding neighborhoods while avoiding monotony throughout the neighborhood. The homes shall relate to the street and open spaces while maintaining a sense of seclusion.

FINAL PLAT
BENNETT RANCH FILING NO. 2
A RESUBDIVISION OF TRACT B, BENNETT RANCH FILING NO. 1
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



OWNERSHIP AND DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED, LGI HOMES INC. BEING THE OWNER OF THE LAND SHOWN IN THIS FINAL PLAT AND DESCRIBED AS FOLLOWS:

TRACT B, BENNETT RANCH FILING NO. 1 LOCATED IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO, CONTAINING 8.918 ACRES, MORE OR LESS.

HAS LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER DRAWING HEREON CONTAINED UNDER THE NAME AND STYLE OF FINAL PLAT BENNETT RANCH FILING NO. 2, A SUBDIVISION OF A PART OF THE TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO, AND BY THESE PRESENTS DOES HEREBY DEDICATE TO THE TOWN OF BENNETT THE STREETS, AVENUES (AND OTHER PUBLIC PLACES, TRACTS/OUTLOTS) AS SHOWN ON THE ACCOMPANYING PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE TOWN OF BENNETT AND ALL SERVING PUBLIC UTILITIES (AND OTHER APPROPRIATE ENTITIES) THOSE PORTION OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS EASEMENTS AND TRACTS AS SHOWN.

IT IS EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTING AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, WATER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS, AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUB-DIVIDER AND ARRANGEMENTS MADE BY THE SUB-DIVIDER, THEREOF WHICH ARE APPROVED BY THE TOWN OF BENNETT, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE TOWN OF BENNETT, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE TOWN OF BENNETT SHALL BECOME THE SOLE PROPERTY OF SAID TOWN OF BENNETT, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES, WHICH WHEN CONSTRUCTED OR INSTALLED SHALL REMAIN AND/OR BECOME THE PROPERTY OF SUCH MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES AND SHALL NOT BECOME THE PROPERTY OF THE TOWN OF BENNETT, COLORADO.

OWNERSHIP CERTIFICATE

FOR: LGI HOMES INC.

BY: TRACYE HERRINGTON, AUTHORIZED SIGNATORY

NOTARY ACKNOWLEDGEMENT

STATE OF COLORADO)
)SS
COUNTY OF _____)

THE FOREGOING CERTIFICATE OF DEDICATION AND OWNERSHIP WAS ACKNOWLEDGED BEFORE ME
THIS _____ DAY OF _____, 20____.
WITNESS MY HAND AND OFFICIAL SEAL _____

NOTARY PUBLIC

MY COMMISSION EXPIRES _____
ADDRESS OF NOTARY: _____

PLAT NOTES

- ALL TRACTS SHALL BE OWNED AND MAINTAINED BY BENNETT RANCH METROPOLITAN DISTRICT, ITS SUCCESSORS OR ASSIGNS. THE UNDERSIGNED GRANTS THE TOWN OF BENNETT A PERPETUAL RIGHT OF INGRESS AND EGRESS FROM AND TO SAID TRACTS. THE TOWN SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO MAINTAIN, OPERATE, REPAIR AND RECONSTRUCT THE TRACT AND RELATED FACILITIES WHEN THE OWNER(S) FAIL TO ADEQUATELY MAINTAIN SUCH TRACTS AND RELATED FACILITIES, WHICH MAINTENANCE, OPERATION AND RECONSTRUCTION SHALL BE AT THE COST OF _____.
- THE POLICY OF THE TOWN REQUIRES THAT MAINTENANCE ACCESS SHALL BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY A SUBDIVISION AGREEMENT OR DEVELOPMENT AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES, THE TOWN OF BENNETT SHALL HAVE THE RIGHT BUT NOT THE OBLIGATION TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COSTS WILL BE ASSESSED TO THE PROPERTY OWNER(S).
- SURFACED ACCESS ROADS CAPABLE OF WITHSTANDING THE IMPOSED LOADS OF FIRE APPARATUS AND ALL REQUIRED FIRE HYDRANTS SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING CONSTRUCTION.
- ALL INTERNAL ROAD AND DRAINAGE FACILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH STREET CONSTRUCTION PLANS, PAVEMENT DESIGN, GRADING AND EROSION CONTROL PLANS, A FINAL DRAINAGE PLAN AND ALL APPLICABLE TOWN ADOPTED STANDARDS AND SPECIFICATIONS SUBMITTED TO AND APPROVED BY THE TOWN OF BENNETT.
- NOTICE IS GIVEN THAT THIS SUBDIVISION WILL BE SUBJECT TO RECORDED DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS. THE TOWN OF BENNETT IS NOT RESPONSIBLE FOR ENFORCEMENT OF THE RECORDED COVENANTS, CONDITIONS AND RESTRICTIONS THAT MAY BE FILED AGAINST THE SUBDIVISION PLAT.
- SIGHT DISTANCE EASEMENTS ARE HEREBY DEDICATED TO THE TOWN OF BENNETT FOR SIGHT DISTANCE PURPOSES TOGETHER WITH THE FOLLOWING RESTRICTIONS OVER SAID EASEMENTS: NO OBJECT WITHIN THE SIGHT DISTANCE EASEMENT SHALL BE MORE THAN THIRTY-SIX (36) INCHES ABOVE THE FLOWLINE OF THE ADJACENT STREET. SUCH OBJECTS SHALL INCLUDE BUT NOT BE LIMITED TO BUILDINGS, VEGETATION, AND UTILITY CABINETS. PARKING IS ALSO RESTRICTED WITHIN THE EASEMENT.
- THERE ARE NO SIGNIFICANT NATURAL DRAINAGE COURSES, GEOLOGIC HAZARD AREAS, OR OTHER NATURAL FEATURES WITHIN OR ADJACENT TO THE SUBDIVISION.
- NON-EXCLUSIVE UTILITY EASEMENTS LOCATED AS SHOWN ARE HEREBY GRANTED FOR THE INSTALLATION, MAINTENANCE, AND OPERATION OF UTILITIES AND DRAINAGE FACILITIES, INCLUDING, BUT NOT LIMITED TO STREET LIGHTS, ELECTRIC LINES, GAS LINES, CABLE TELEVISION LINES, FIBER OPTIC LINES, AND TELEPHONE LINES, AS WELL AS PERPETUAL RIGHT FOR INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF SUCH LINES. WINDOW WELLS, PATIOS, DECKS, STAIRS, RETAINING WALLS, AND THEIR COMPONENTS MAY NOT ENCROACH INTO THE REQUIRED UTILITY EASEMENTS.
- MONUMENTS, ORNAMENTAL COLUMNS, WINDOW WELLS, COUNTERFORTS, PATIOS, DECKS, RETAINING WALLS AND THEIR COMPONENTS ARE NOT PERMITTED TO ENCROACH INTO UTILITY EASEMENTS.
- NON-EXCLUSIVE TRANSPORTATION EASEMENTS LOCATED AS SHOWN ARE HEREBY GRANTED FOR THE INSTALLATION, MAINTENANCE, AND OPERATION OF SIDEWALKS RUNNING PARALLEL WITH STREET RIGHTS-OF-WAY.
- THIS PLAT CONTAINS 84 MULTI-FAMILY LOTS AND VARIOUS TRACTS, AS SHOWN IN THE TRACT SUMMARY ON SHEET 2 OF THIS PLAT DOCUMENT.
- THE BENNETT RANCH METROPOLITAN DISTRICT SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR, AS WELL AS MOSQUITO CONTROL, OF PARKS, OPEN SPACE AND TRAILS ON TRACTS A, B, C, D, E, F, G, H AND I.
- FOR SUBDIVISION BOUNDARY MONUMENTATION, MINIMUM STANDARDS FOR MONUMENTS MUST CONFORM TO THE COLORADO REVISED STATUTES 2017, MONUMENTATION OF SUBDIVISIONS, CRTS 38-51-105.
- IF A SUBDIVISION BOUNDARY CORNER FALLS WITHIN DEDICATED STREET RIGHT-OF-WAY, THE MONUMENT SHALL BE PLACED 6-INCHES BELOW THE SURFACE OF THE PAVEMENT IN A MONUMENT BOX. THE TOP OF THE BOX SHALL BE SET FLUSH WITH THE SURFACE OF THE PAVEMENT.
- NO CERTIFICATE OF OCCUPANCIES WILL BE ISSUED FOR ANY LOT UNTIL ALL PUBLIC IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS, HAVE BEEN COMPLETED AS REQUIRED BY THE SUBDIVISION AGREEMENT.
- EXPANSIVE SOILS ARE KNOWN TO EXIST ON THE SITE. WHERE THESE CONDITIONS ARE FOUND TO EXIST, THE RECOMMENDATIONS OF A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE FOLLOWED IN THE DESIGN AND CONSTRUCTION OF IMPROVEMENTS, AND FOUNDATIONS AND FOOTINGS FOR STRUCTURES.
- NON-EXCLUSIVE 5 FOOT, 10-FOOT AND 15-FOOT UTILITY EASEMENTS LOCATED AS SHOWN ARE HEREBY GRANTED FOR THE INSTALLATION, MAINTENANCE, AND OPERATION OF UTILITIES AND DRAINAGE FACILITIES, INCLUDING, BUT NOT LIMITED TO, STREET LIGHTS, ELECTRIC LINES, GAS LINES, CABLE TELEVISION LINES, FIBER OPTIC LINES, AND TELEPHONE LINES, AS WELL AS PERPETUAL RIGHT FOR INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF SUCH LINES.
- ALL INTERIOR STREETS SHOWN ON THIS FINAL PLAT ARE HEREBY DEDICATED TO THE TOWN OF BENNETT PER THIS FINAL PLAT.

SURVEYOR'S NOTES

- NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATE SHOWN HEREON.
- FIDELITY NATIONAL TITLE, COMMITMENT NUMBER: 100-N0028937-020-CN1 DATED AUGUST 26, 2020 WAS RELIED UPON BY DALEY LAND SURVEYING, INC. FOR RECORD INFORMATION REGARDING RIGHTS-OF-WAY, EASEMENTS, AND ENCUMBRANCES. THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH TO DETERMINE OWNERSHIP, EASEMENTS OR OTHER MATTERS OF PUBLIC RECORD BY DALEY LAND SURVEYING, INC.

SURVEYOR'S NOTES

- TRACT B IS LOCATED ON FEMA FIRM MAP NUMBER 08001C0718H DATED MARCH 5, 2007, AND LIES WITHIN ZONE X. ZONE X IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH P.M., ASSUMED TO BEAR NORTH 89°15'08" EAST, A DISTANCE OF 2640.44 FEET (NORTH 89°15'08" EAST, A DISTANCE OF 2640.44 FEE PER THE PLAT OF BENNETT RANCH – FILING NO. 1 RECORDED AT RECEPTION NO. 20020000123425), MONUMENTED BY A FOUND 3 1/4" ALUMINUM CAP MARKED PLS 14108 ON A #6 REBAR AT THE NORTHEAST CORNER OF SAID SECTION 27 AND THE CALCULATED POSITION FROM THE FOUND 3 1/4" ALUMINUM CAP MARKED 30' W.C. PLS 14108 ON A #6 REBAR AT THE NORTH QUARTER CORNER OF SAID SECTION 27.
- THE FIELD SURVEY WAS COMPLETED ON JUNE 10, 2021.
- DISTANCES SHOWN HEREIN ARE IN U.S. SURVEY FEET.

TOWN APPROVAL BLOCK

THIS IS TO CERTIFY THAT THE PLAT OF FINAL PLAT BENNETT RANCH FILING NO. 2 WAS APPROVED ON THE _____ DAY OF _____ 20____ BY RESOLUTION NO. _____ AND THAT THE MAYOR OF THE TOWN OF BENNETT ON BEHALF OF THE TOWN OF BENNETT, HEREBY ACKNOWLEDGES SAID PLAT UPON WHICH THIS CERTIFICATE IS ENDORSED FOR ALL PURPOSES INDICATED THEREON.

ATTEST: _____
MAYOR TOWN CLERK

SURVEY CERTIFICATION

I, ROBERT DALEY, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT I MADE THE WITHIN AND FOREGOING PLAT AND DESCRIPTION OF THE LAND AS HEREIN DESCRIBED, AND THAT THE LOTS, ANGLES, DISTANCES, AREA AND LOCATION, AS INDICATED ON SAID PLAT AND CONTAINED IN SAID DESCRIPTIONS, ARE TRUE AND CORRECT, TO THE BEST OF MY KNOWLEDGE.

ROBERT DALEY, PLS
COLORADO REG. NO. 35597
FOR AND ON BEHALF OF DALEY LAND SURVEYING, INC.

DISTRICT ACCEPTANCE

THE UNDERSIGNED BENNETT RANCH METROPOLITAN DISTRICT HEREBY ACKNOWLEDGES AND ACCEPTS THE GRANT OF EASEMENTS AND TRACTS TO THE UNDERSIGNED AS DESIGNATED AND SHOWN HEREON FOR MAINTENANCE RESPONSIBILITY AS SPECIFIED HEREON.

BENNETT RANCH METROPOLITAN DISTRICT, A QUASI-MUNICIPAL CORPORATION AND POLITICAL SUBDIVISION OF THE STATE OF COLORADO.

BY: _____
BENNETT RANCH LLC

THE FOREGOING WAS ACKNOWLEDGED BEFORE ME BY THIS _____ DAY OF _____, 20____ BY _____ ACTING IN HIS CAPACITY AS _____ OF BENNETT RANCH METROPOLITAN DISTRICT, A QUASI-MUNICIPAL CORPORATION AND POLITICAL SUBDIVISION OF THE STATE OF COLORADO

WITNESS MY HAND AND OFFICIAL SEAL _____

MY COMMISSION EXPIRES _____

NOTARY PUBLIC

CLERK AND RECORDER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT FILED IN THE OFFICE OF THE CLERK AND RECORDER OF ADAMS COUNTY, COLORADO AT _____ O'CLOCK ___, M. ON THIS _____ DAY OF _____, 20____.

RECEPTION NUMBER _____

CLERK AND RECORDER DEPUTY

SHEET INDEX

SHEET 1 COVER SHEET
SHEET 2 SHEET INDEX MAP
SHEET 3 BOUNDARY MAP
SHEET 4 PLAN SHEET
SHEET 5 PLAN SHEET

DATE: OCTOBER 15, 2021	REVISIONS		BY	DATE	
					SURVEYED BY: SE
					DRAWN BY: AV
					CHECKED BY: RD
					JOB NUMBER: 1906-006

SHEET 1 OF 5

FINAL PLAT
BENNETT RANCH FILING NO. 2

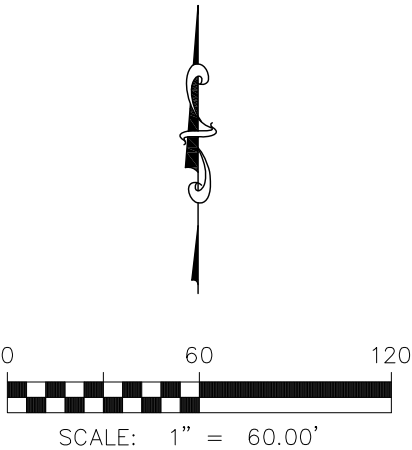


FINAL PLAT

BENNETT RANCH FILING NO. 2

A RESUBDIVISION OF TRACT B, BENNETT RANCH FILING NO. 1

LOCATED IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



TRACT B RIGHT OF WAY LINE
AND CURVE TABLES

LINE	BEARING	DISTANCE
TRBL1	S61°47'47"W	1.34'
TRBL2	N89°24'22"E	96.00'
TRBL3	S89°24'22"W	98.79'
TRBL4	S89°24'22"W	99.23'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
TRBC1	15.53'	55.00'	16°10'41"	N73°52'18"E	15.48'
TRBC2	18.74'	13.00'	82°36'10"	N40°39'33"E	17.16'
TRBC3	8.17'	13.00'	36°01'37"	S18°36'27"E	8.04'
TRBC4	12.25'	13.00'	53°58'23"	S63°36'27"E	11.80'
TRBC5	11.05'	13.00'	48°40'51"	S65°03'56"W	10.72'
TRBC6	9.38'	13.00'	41°19'09"	S20°03'56"W	9.17'
TRBC7	9.38'	13.00'	41°19'09"	N21°15'13"W	9.17'
TRBC8	11.05'	13.00'	48°40'51"	N66°15'13"W	10.72'
TRBC9	12.05'	25.00'	27°36'35"	S75°36'04"W	11.93'

LAND USE TABLE

TRACT	SQ.FT. (ACRES)	LAND USE	OWNERSHIP / MAINTENANCE
A	3,342 S.F. (0.077)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	BENNETT RANCH METROPOLITAN DISTRICT
B	18,749 S.F. (0.430)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
C	14,983 S.F. (0.344)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
D	6,928 S.F. (0.159)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
E	24,506 S.F. (0.563)	OPEN SPACE	BENNETT RANCH METROPOLITAN DISTRICT
F	17,472 S.F. (0.401)	OPEN SPACE	
G	22,327 S.F. (0.513)	OPEN SPACE	
H	6,613 S.F. (0.152)	OPEN SPACE	
I	8,264 S.F. (0.189)	OPEN SPACE	

LAND USE TABLE

LAND USE	AREA IN ACRES	% OF TOTAL	OWNER / MAINTENANCE
LOTS (84)	5.122	57.43	PRIVATE
TRACTS (9)	2.828	31.71	BENNETT RANCH METROPOLITAN DISTRICT
RIGHT-OF-WAY (PINTABIAN DRIVE)	0.968	10.85	TOWN OF BENNETT
TOTAL	8.918	100.00	

PINTABIAN DRIVE AND ALLEY CENTERLINE
LINE AND CURVE TABLES

LINE	BEARING	DISTANCE
CL1	N84°24'22"E	32.62'
CL2	N84°24'22"E	48.98'
CL3	N89°24'22"E	23.62'
CL4	N89°24'22"E	10.01'
CL5	S89°24'22"W	107.03'
CL6	S00°35'38"E	141.95'
CL7	N89°24'22"E	43.97'
CL8	N89°24'22"E	58.03'
CL9	N89°24'22"E	62.72'
CL10	S83°16'22"E	11.14'
CL11	S83°16'22"E	32.62'
CL12	N00°35'38"W	136.09'
CL13	N61°47'47"E	26.46'
CL14	N89°24'22"E	19.19'
CL15	N89°24'22"E	108.04'
CL16	N89°24'22"E	126.79'
CL17	N00°35'38"W	140.06'
CL18	S00°35'38"E	140.11'
CL19	S05°35'38"E	219.52'
CL20	S00°35'38"E	144.08'
CL21	S00°35'38"E	25.80'
CL22	S00°35'38"E	264.92'
CL23	S00°35'38"E	255.87'
CL24	S00°35'38"E	25.03'

PINTABIAN DRIVE RIGHT OF
WAY LINE
AND CURVE TABLES

LINE	BEARING	DISTANCE
ROWL1	N84°24'22"E	24.96'
ROWL2	N89°24'22"E	8.62'
ROWL3	N89°24'22"E	30.00'
ROWL4	N89°24'22"E	96.00'
ROWL5	N89°24'22"E	15.00'
ROWL6	N89°24'22"E	34.04'
ROWL7	S00°35'38"E	185.00'
ROWL8	N89°24'22"E	17.00'
ROWL9	N89°24'22"E	88.00'
ROWL10	N89°24'22"E	30.00'
ROWL11	N89°24'22"E	47.72'
ROWL12	S89°24'22"W	9.74'
ROWL13	S89°24'22"W	96.00'
ROWL14	S89°24'22"W	30.00'
ROWL15	S89°24'22"W	71.97'
ROWL16	N00°35'38"W	185.95'
ROWL17	N00°35'38"W	1.50'
ROWL18	S89°24'22"W	93.03'
ROWL19	S89°24'22"W	30.00'
ROWL20	S89°24'22"W	18.63'
ROWL21	S84°24'22"W	32.84'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
ROWC1	26.36'	20.00'	75°31'21"	S38°21'19"E	24.49'
ROWC2	6.80'	20.00'	19°28'39"	S85°51'19"E	6.77'
ROWC3	45.81'	525.00'	5°00'00"	N86°54'22"E	45.80'
ROWC4	41.28'	45.00'	52°33'43"	S64°18'47"E	39.85'
ROWC5	15.13'	45.00'	19°15'34"	S28°24'08"E	15.06'
ROWC6	14.28'	45.00'	18°10'41"	S09°41'00"E	14.22'
ROWC7	49.51'	37.00'	76°39'53"	S43°17'48"E	50.18'
ROWC8	36.78'	325.00'	6°29'04"	S87°21'06"E	36.76'
ROWC9	3.05'	20.00'	8°44'45"	S88°28'57"E	3.05'
ROWC10	26.50'	20.00'	75°54'49"	N49°11'16"E	24.60'
ROWC11	34.17'	20.00'	97°54'01"	N37°13'22"W	30.17'
ROWC12	21.22'	275.00'	4°25'16"	N88°23'00"W	21.21'
ROWC13	70.69'	45.00'	90°00'00"	N45°35'38"W	63.64'
ROWC14	55.15'	37.00'	85°24'03"	S43°17'48"E	50.18'
ROWC15	41.45'	475.00'	5°00'00"	S86°54'22"W	41.44'
ROWC16	29.67'	20.00'	85°00'00"	S41°54'22"W	27.02'
ROWC17	2.97'	37.00'	4°35'57"	S88°17'40"E	2.97'
ROWC18	18.06'	37.00'	12°29'13"	S84°21'02"E	18.05'

LEGEND

- Right of Way Line
- Lot/Tract Line
- Easement Line
- Centerline

SHEET INDEX

SHEET 1 COVER SHEET
SHEET 2 SHEET INDEX MAP
SHEET 3 BOUNDARY MAP
SHEET 4 PLAN SHEET
SHEET 5 PLAN SHEET

DATE: OCTOBER 15, 2021	REVISIONS	BY	DATE	SURVEYED BY: SE
				DRAWN BY: AV
				CHECKED BY: RD
				JOB NUMBER: 1906-006

SHEET 2 OF 5

FINAL PLAT

BENNETT RANCH FILING NO. 2



FINAL PLAT
BENNETT RANCH FILING NO. 2
A RESUBDIVISION OF TRACT B, BENNETT RANCH FILING NO. 1
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



SHEET INDEX

SHEET 1 COVER SHEET
SHEET 2 SHEET INDEX MAP
SHEET 3 BOUNDARY MAP
SHEET 4 PLAN SHEET
SHEET 5 PLAN SHEET

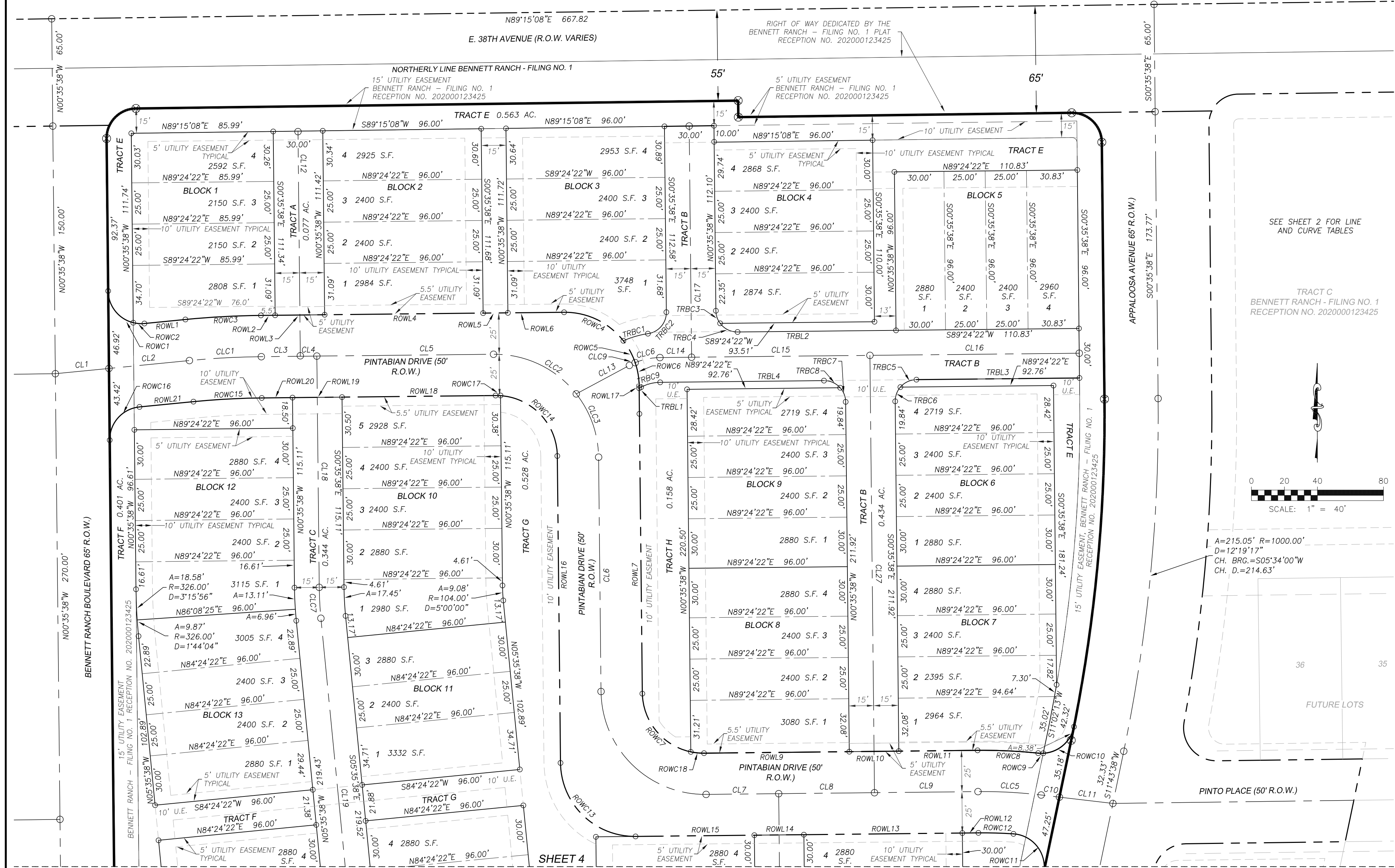
DATE: OCTOBER 15, 2021	REVISIONS	BY	DATE	SURVEYED BY: SE
				DRAWN BY: AV
				CHECKED BY: RD
				JOB NUMBER: 1906-006

SHEET 3 OF 5

FINAL PLAT
BENNETT RANCH FILING NO. 2



FINAL PLAT
BENNETT RANCH FILING NO. 2
A RESUBDIVISION OF TRACT B, BENNETT RANCH FILING NO. 1
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



SHEET INDEX

- SHEET 1 COVER SHEET
- SHEET 2 SHEET INDEX MAP
- SHEET 3 BOUNDARY MAP
- SHEET 4 PLAN SHEET
- SHEET 5 PLAN SHEET

DATE:
OCTOBER 15, 2021

REVISIONS

BY

DATE

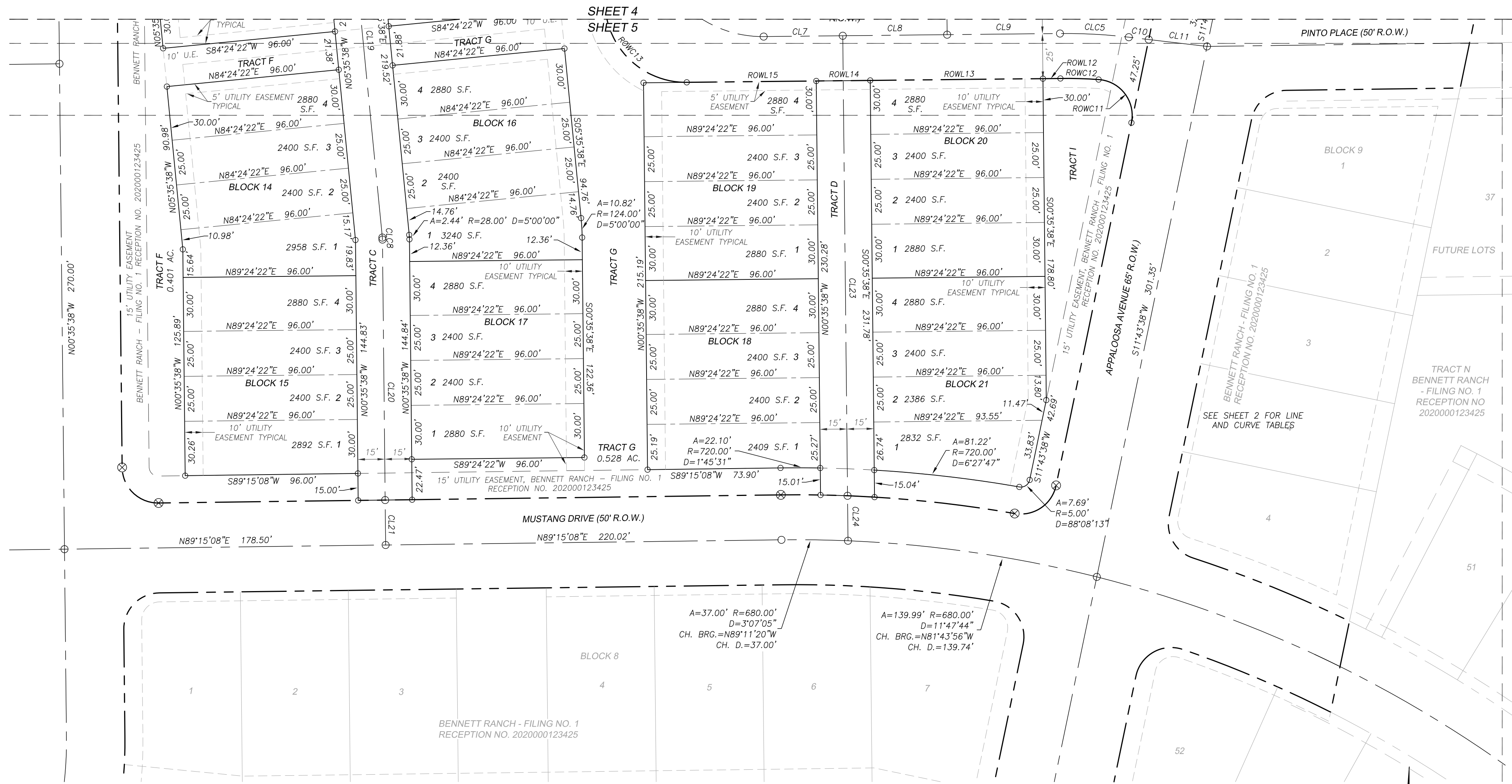
SURVEYED BY: SE
DRAWN BY: AV
CHECKED BY: RD
JOB NUMBER:
1906-006

SHEET 4 OF 5

FINAL PLAT
BENNETT RANCH FILING NO. 2



FINAL PLAT
BENNETT RANCH FILING NO. 2
A RESUBDIVISION OF TRACT B, BENNETT RANCH FILING NO. 1
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO

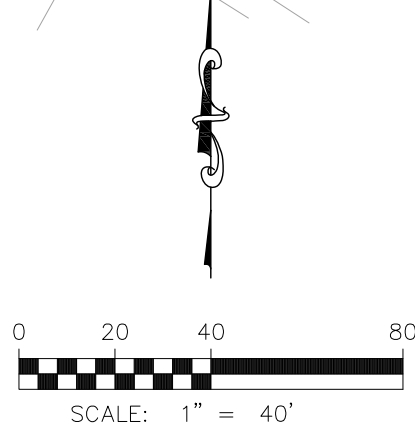


BOUNDARY LEGEND

- FOUND MONUMENT AS NOTED
- POT, POC, DIRECTION CHANGE POINT (NOT TO BE SET)
- ⊗ 1" YELLOW PLASTIC CAP PLS 35597 ON A #4 REBAR TO BE SET
- ◆ FOUND SECTION CORNER AS NOTED

BOUNDARY LEGEND

- EASEMENT LINE
- LOT/TRACT LINE
- SECTION LINE
- CENTERLINE
- RIGHT OF WAY LINE



SHEET INDEX

SHEET 1 COVER SHEET
SHEET 2 SHEET INDEX MAP
SHEET 3 BOUNDARY MAP
SHEET 4 PLAN SHEET
SHEET 5 PLAN SHEET

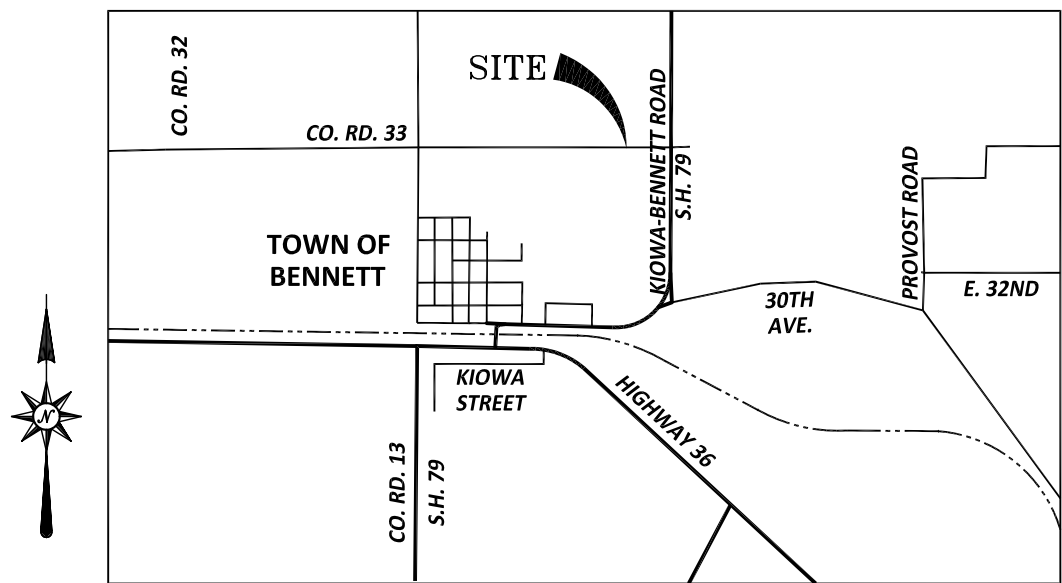
DATE: OCTOBER 15, 2021	REVISIONS	BY	DATE	SURVEYED BY: SE
				DRAWN BY: AV
				CHECKED BY: RD
				JOB NUMBER: 1906-006
SHEET 5 OF 5				

FINAL PLAT
BENNETT RANCH FILING NO. 2



REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO

Revise title block on all sheets per Town Attorney's referral response.



VICINITY MAP
1"=4000'

Remove Notes 3, 4 and 5. Add standard Town of Bennett plat notes, conveyed in separate MS Word doc.

OWNERSHIP AND DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED, LGI HOMES INC. BEING THE OWNER OF THE LAND SHOWN IN THIS REPLAT AND DESCRIBED AS FOLLOWS:

TRACT B, BENNETT RANCH – FILING NO. 1 IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO.

HAS LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER DRAWING HEREON CONTAINED UNDER THE NAME AND STYLE OF BENNETT RANCH –FILING NO. 1, A SUBDIVISION OF A PART OF THE TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO, AND BY THESE PRESENTS DOES HEREBY DEDICATE TO THE TOWN OF BENNETT THE STREETS, AVENUES (AND OTHER PUBLIC PLACES, TRACTS/OUTLOTS) AS SHOWN ON THE ACCOMPANYING PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE TOWN OF BENNETT AND ALL SERVING PUBLIC UTILITIES (AND OTHER APPROPRIATE ENTITIES) THOSE PORTION OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS EASEMENTS AND TRACTS AS SHOWN.

IT IS EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTING AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, WATER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS, AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUB-DIVIDER AND ARRANGEMENTS MADE BY THE SUB-DIVIDER, THEREOF WHICH ARE APPROVED BY THE TOWN OF BENNETT, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE TOWN OF BENNETT, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE TOWN OF BENNETT SHALL BECOME THE SOLE PROPERTY OF SAID TOWN OF BENNETT, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES, WHICH WHEN CONSTRUCTED OR INSTALLED SHALL REMAIN AND/OR BECOME THE PROPERTY OF SUCH MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES AND SHALL NOT BECOME THE PROPERTY OF THE TOWN OF BENNETT, COLORADO.

OWNERSHIP CERTIFICATE

FOR: LGI HOMES INC.

BY: TRAYCE HERRINGTON, Authorized Signatory

NOTARY ACKNOWLEDGEMENT

STATE OF COLORADO)
COUNTY OF _____)SS

THE FOREGOING CERTIFICATE OF DEDICATION AND OWNERSHIP WAS READ AND ACCEPTED BY ME BEFORE ME
THIS _____ DAY OF _____

WITNESS MY HAND AND OFFICIAL SEAL _____

NOTARY PUBLIC

MY COMMISSION EXPIRES _____

ADDRESS OF NOTARY: _____

Please submit an updated Title Commitment. Commitment submitted with application is dated August 2020 and indicates K. Newby is the owner.

Change on all sheets to reflect new name of plat, per Town Atty comments.

PLAT NOTES

Why not Tracts A - I?

1. THIS PLAT CONTAINS 84 MULTI-FAMILY LOTS AND VARIOUS TRACTS, AS SHOWN IN THE TRACT SUMMARY ON SHEET 2 OF THIS PLAT DOCUMENT.
2. THE BENNETT RANCH METROPOLITAN DISTRICT SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR, AS WELL AS MOSQUITO CONTROL, OF PARKS, OPEN SPACE AND TRAILS ON TRACTS B, C, D, E, F AND G.
3. SIGHT VISIBILITY TRIANGLES ARE IMPOSED AT ALL INTERSECT/ON LOCATIONS WITHIN THIS SUBDIVISION. THESE TRIANGLES SHALL CONFORM TO THE TOWN OF BENNETT ROADWAY DESIGN AND CONSTRUCTION STANDARDS, SECTION 4.5.8.1 (E) AND FIGURE 4.2, AS MAY BE AMENDED FROM TIME TO TIME.
4. THE TOWN OF BENNETT IS NOT RESPONSIBLE FOR THE ENFORCEMENT OF PRIVATE COVENANTS, CONDITIONS AND RESTRICTIONS. THE HOMEOWNERS ASSOCIATION SHALL BE CREATED AND IN PLACE PRIOR TO RECORDING OF THIS PLAT.
5. A BLANKET DRAINAGE EASEMENT, EXCLUDING BUILDING FOOTPRINTS AND EXCLUSIVE EASEMENTS, IS HEREBY GRANTED TO AND BETWEEN ALL LOTS WITHIN THE SUBDIVISION FOR THE PURPOSES OF CONVEYING SURFACE AND SUBSURFACE STORMWATER, CONSTRUCTION, MAINTENANCE, REPAIR AND ACCESS TO THE IMPROVEMENTS THE UNDERLYING PROPERTY OWNER OR ASSIGNS WILL BE RESPONSIBLE FOR MAINTENANCE OF THE EASEMENT AREA.
6. FOR SUBDIVISION BOUNDARY MONUMENTATION, MINIMUM STANDARDS FOR MONUMENTS MUST CONFORM TO THE COLORADO REVISED STATUTES 2017, MONUMENTATION OF SUBDIVISIONS, CRS 38-51-105.
7. IF A SUBDIVISION BOUNDARY CORNER FALLS WITHIN DEDICATED STREET RIGHT-OF-WAY, THE MONUMENT SHALL BE PLACED 6-INCHES BELOW THE SURFACE OF THE PAVEMENT IN A MONUMENT BOX. THE TOP OF THE BOX SHALL BE SET FLUSH WITH THE SURFACE OF THE PAVEMENT.
8. NO BUILDING PERMITS WILL BE ISSUED FOR ANY LOT UNTIL ALL PUBLIC IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS, HAVE BEEN COMPLETED AS REQUIRED BY THE SUBDIVISION AGREEMENT.
9. EXPANSIVE SOILS ARE KNOWN TO EXIST ON THE SITE. WHERE THESE CONDITIONS ARE FOUND TO EXIST, THE RECOMMENDATIONS OF A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE FOLLOWED IN THE DESIGN AND CONSTRUCTION OF IMPROVEMENTS, AND FOUNDATIONS AND FOOTINGS FOR STRUCTURES. BOARD OF TRUSTEES APPROVAL ACKNOWLEDGMENT CERTIFICATE BENNETT RANCH LLS METROPOLITAN DISTRICT HEREBY ACKNOWLEDGES AND ACCEPTS ITS PERPETUAL MAINTENANCE RESPONSIBILITIES FOR THE TRACTS SET FORTH ON THIS PLAT.

See Town Atty's comments on this note.

SURVEYOR'S NOTES

1. NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATE SHOWN HEREON.
2. XXXXXX TITLE GUARANTY COMPANY, COMMITMENT NUMBER: XXXXX DATED XXXXX, 2021 AT XXX P.M. WAS RELIED UPON BY DALEY LAND SURVEYING, INC. FOR RECORD INFORMATION REGARDING RIGHTS-OF-WAY, EASEMENTS, AND ENCUMBRANCES. THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH TO DETERMINE OWNERSHIP, EASEMENTS OR OTHER MATTERS OF PUBLIC RECORD BY DALEY LAND SURVEYING, INC.
3. TRACT B IS LOCATED ON FEMA FIRM MAP NUMBER 08001C0718H DATED MARCH 5, 2007, AND LIES WITHIN ZONE X. ZONE X IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
4. BEARINGS ARE ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH P.M., ASSUMED TO BEAR NORTH 89°15'08" EAST, A DISTANCE OF 2640.44 FEET (NORTH 89°15'08" EAST, A DISTANCE OF 2640.44 FEE PER THE PLAT OF BENNETT RANCH – FILING NO. 1 RECORDED AT RECEPTION NO. 20020000123425), MONUMENTED BY A FOUND 3 1/4" ALUMINUM CAP MARKED PLS 14108 ON A #6 REBAR AT THE NORTHEAST CORNER OF SAID SECTION 27 AND THE CALCULATED POSITION FROM THE FOUND 3 1/4" ALUMINUM CAP MARKED 30' W.C. PLS 14108 ON A #6 REBAR AT THE NORTH QUARTER CORNER OF SAID SECTION 27.
5. THE FIELD SURVEY WAS COMPLETED ON JUNE 10, 2021.
6. DISTANCES SHOWN HEREIN ARE IN U.S. SURVEY FEET.
7. STREET "A" SHOWN ON THIS REPLAT IS HEREBY DEDICATED TO THE TOWN OF BENNETT PER THIS REPLAT.

PLANNING AND ZONING COMMISSION APPROVAL

THIS PLAT, TO BE KNOWN AS REPLAT OF BENNETT RANCH – FILING NO. 1, WAS APPROVED BY ACTION OF THE PLANNING AND ZONING COMMISSION OF THE TOWN OF JOHNSTOWN, COLORADO AT A REGULAR MEETING HELD ON THE _____ DAY OF _____, 20_____.

BY: _____
CHAIR, PLANNING AND ZONING COMMISSION

Remove P&Z title block.

TOWN COUNCIL APPROVAL

THIS PLAT, TO BE KNOWN AS REPLAT OF BENNETT RANCH – FILING NO. 1, IS APPROVED AND ACCEPTED BY THE TOWN OF BENNETT, BY RESOLUTION NUMBER _____, PASSED AND ADOPTED ON FINAL READING AT A REGULAR MEETING OF THE TOWN COUNCIL OF THE TOWN OF JOHNSTOWN, COLORADO HELD ON THE _____ DAY OF _____, 20_____.

BY: _____
MAYOR

ATTEST: _____
Remove and replace with language from Town Atty.

SURVEY CERTIFICATION

I, ROBERT DALEY, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT I MADE THE WITHIN AND FOREGOING PLAT AND DESCRIPTION OF THE LAND AS HEREIN DESCRIBED, AND THAT THE LOTS, ANGLES, DISTANCES, AREA AND LOCATION, AS INDICATED ON SAID PLAT AND CONTAINED IN SAID DESCRIPTIONS, ARE TRUE AND CORRECT, TO THE BEST OF MY KNOWLEDGE.

ROBERT DALEY, PLS
COLORADO REG. NO. 35597
FOR AND ON BEHALF OF DALEY LAND SURVEYING, INC.

DISTRICT ACCEPTANCE

THE UNDERSIGNED BENNETT RANCH METROPOLITAN DISTRICT HEREBY ACKNOWLEDGES AND ACCEPTS THE GRANT OF EASEMENTS TO THE UNDERSIGNED AS DESIGNATED AND SHOWN HEREON FOR MAINTENANCE RESPONSIBILITY AS SPECIFIED HEREON.

BENNETT RANCH METROPOLITAN DISTRICT, A QUASI-MUNICIPAL CORPORATION AND POLITICAL SUBDIVISION OF THE STATE OF COLORADO.

NOTICE: _____
BENNETT RANCH LLC

THE FOREGOING WAS ACKNOWLEDGED BEFORE ME BY THIS _____ DAY OF _____, 20_____ BY _____ ACTING IN HIS

CAPACITY AS _____

OF BENNETT RANCH METROPOLITAN DISTRICT, A QUASI-MUNICIPAL CORPORATION AND POLITICAL SUBDIVISION OF THE STATE OF COLORADO

WITNESS MY HAND AND OFFICIAL SEAL _____

MY COMMISSION EXPIRES _____

NOTARY PUBLIC

CLERK AND RECORDER'S CERTIFICATE

DEPOSITED THIS _____ DAY OF _____, 20_____ AT _____ M.,

IN BOOK _____ AT PAGE _____ AS RECEPTION NO. _____

OF _____ COUNTY CLERK AND RECORDER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT WAS FILED IN THE OFFICE OF THE CLERK AND RECORDER OF ADAMS COUNTY, COLORADO AT _____ O'CLOCK _____ M. ON THIS _____ DAY OF _____, 20_____.

RECEPTION NUMBER _____

CLERK AND RECORDER

DEPUTY

SHEET INDEX

SHEET 1 COVER SHEET
SHEET 2 SHEET INDEX MAP
SHEET 3 BOUNDARY MAP
SHEET 4 PLAN SHEET
SHEET 5 PLAN SHEET

DATE: JULY 23, 2021	REVISIONS		BY	DATE	
					SURVEYED BY: SE
					DRAWN BY: AV
					CHECKED BY: RD
					JOB NUMBER: 1906-006

SHEET 1 OF 5

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B





Engineering Review Memo

To: Steve Hebert, Town Planning & Economic Development Director
Sara Aragon, Community Development Manager
From: Dan Giroux, PE, Engineering Consultant to the Town
Date: Monday, September 13, 2021
Case: Bennett Ranch North R-3 Townhomes Final Plat – 1st Submittal
Subject: Civil Engineering Review

Per the request of the Town of Bennett, Terramax, Inc. has reviewed the 1st LGI/Kimley-Horn submittal of the Final Plat application materials, for the proposed Bennett Ranch North R-3 Townhomes subdivision development.

This review does not constitute a contractual offer to the applicant, and does not relieve the applicant from meeting the Town's requirement that the development comply with all Town Codes and Standards. All prior comments on the development application, including prior Bennett Ranch Phase 1 review comments, are still in force, until acceptably addressed.

Although every attempt has been made to be diligent, thorough and comprehensive, by the nature of review, and relative time invested versus design and plan development, the Town must reserve the right to make original comments and revision requests in subsequent submittals, even for information already submitted, until final application approval.

I have the following comments to offer on the application materials:

Final Plat & General

1. Confirm Tract E and easement width along East 38th Avenue is sufficient for IREA/CORE underground purposes and requirements.
2. Local street 90-degree intersection right-of-way will require Town widened "knuckle" treatment, or waiver from Town Traffic Engineer based on a design large-vehicle turn analysis.
3. Tracts A and B may be extended to East 38th Avenue and/or Appaloosa Avenue to accommodate requested emergency vehicle access (EVA) or water system extensions and connections.

Water System

1. Fire hydrant system layout subject to review by Bennett-Watkins Fire Rescue (BWFR).
2. Connections to East 38th Avenue via Tract A and Tract B "North" required to provide subject townhomes redundant, looped service, for outage and "dead-water" purposes.
 - The requested Tract B connection appears to possibly affect the corresponding East 38th fire hydrant location.

3. Common- or shared-area Tracts E, F, and G may benefit from water piping and water meter setup to support future reuse (purple pipe) water delivery, to minimize water development impact fees, and maximize reuse water use.

Sanitary Sewer System

1. The existing collection system description on page 1 does not appear to be correct for the road names described.
2. The Appendix B shows the Bennett School District parcel to the southwest, but not the subject parcel sanitary sewer layout.

Streets & Access

1. 90-degree Local Street intersections may require widened turning radius "knuckle" treatments per Town Standards, or waiver per Town Traffic Engineer and BWFR, for large design-vehicle turn movement.
2. Asphalt-paved valley-section alleys will require a center concrete drainage pan.
3. Sidewalk-alley intersection crossing vertical alignments will need to be ADA-compliant; the end ramp treatments are not obvious to me from the Drainage exhibit graphic.
4. Emergency vehicle access may be desired via Tract B "East" to Appaloosa Avenue dependent on BWFR and Town Traffic comments.
 - The EVA could be landscape "no-planting" breaks, fencing breaks depending on fence proposals, and fire apparatus-capable surfacing, with appropriate signage.
 - The intent would be to make this EVA not usable or not attractive for regular traffic use.

Stormwater

1. Please confirm Bennett Ranch Blvd and Appaloosa Avenue half-street inundation depths and spread-width coverage areas, for the max impact area prior to storm sewer inlet interception.
 - These appear to be extended street runs without storm sewer, for townhome-area and -density, and East 38th Avenue pavement, tributary areas.
2. Roof-downspout and splash pads to street, alley, swale or storm sewer outfall points will be important to track for pedestrian sidewalk crossings, wintertime icing potential, and chase sections as needed.

Steve, Sara, this concludes my civil engineering review of the 1st submittal application materials for the Bennett Ranch North R-3 Townhomes Final Plat. Please let me know if you have any questions, or require additional information pertaining to the submitted information, or my review.

Memorandum

To: Steve Hebert, AICP, Bennett Planning & Economic Development Manager

From: Gabrielle Renner, PE PTOE RSP1
Town Traffic Engineer

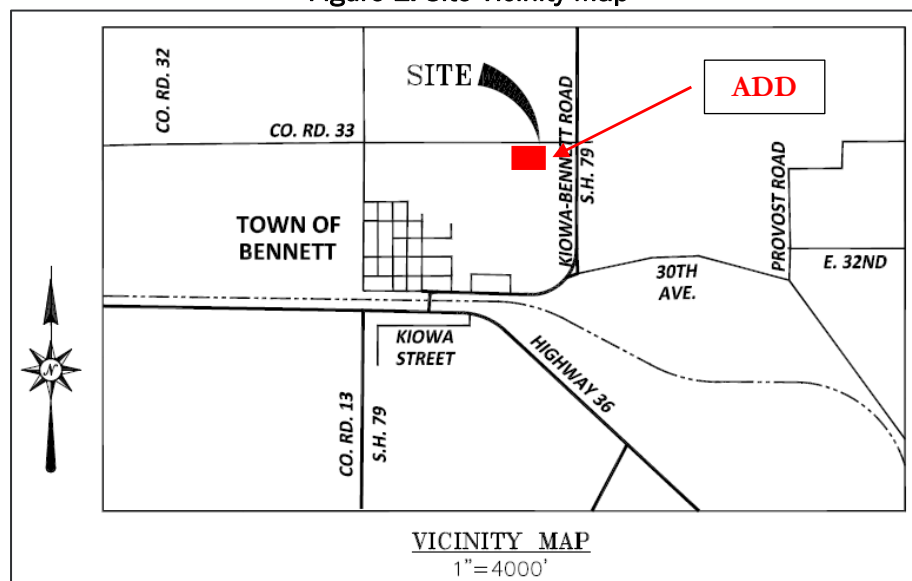
Date: 9/8/2021

Re: Town Land Use Case 21.26: Bennett Ranch North R-3 Townhomes Final Plat
Town Traffic Engineering Review

The Bennett Ranch North R-3 Townhomes Final Plat application materials were submitted on August 18, 2021. The application materials were reviewed, and the following comments have been provided by the Town Traffic Engineer.

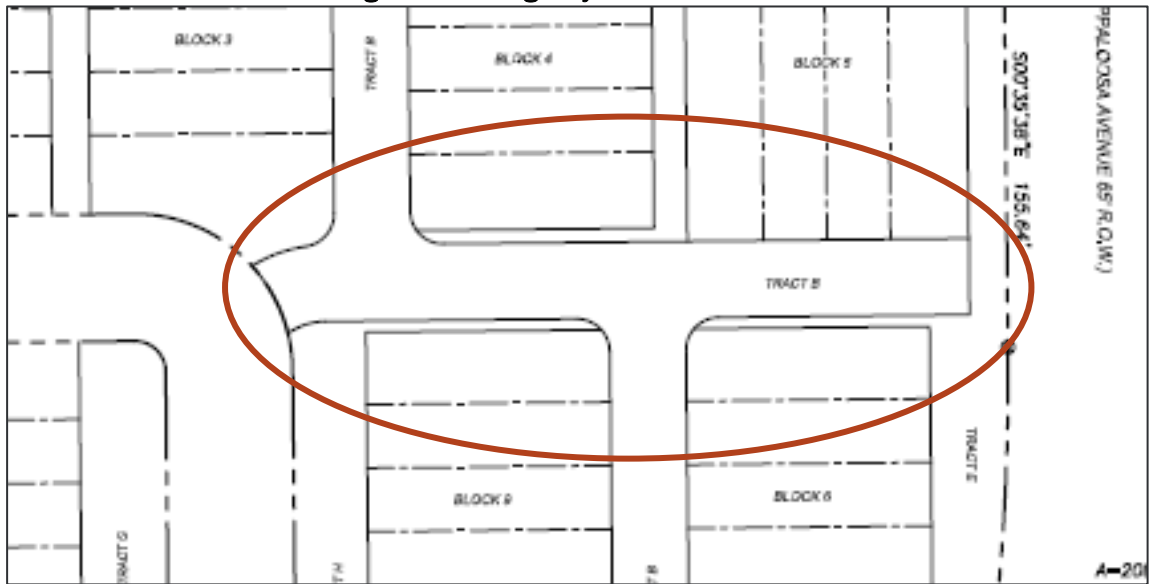
- Final Plat – 1st Submittal dated July 23, 2021
 - The site vicinity map should better define the site location on on Page 1.

Figure 1: Site Vicinity Map



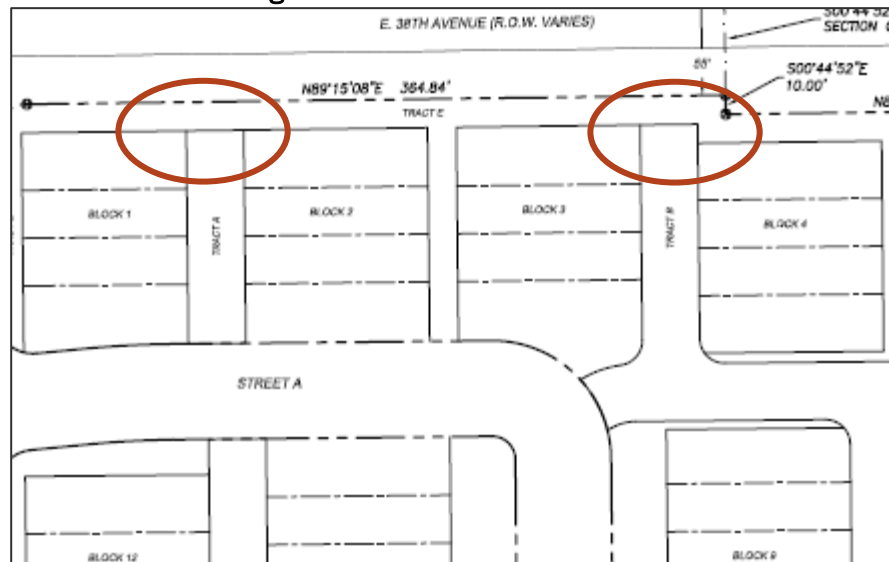
- Track A, Track B, and Track C provides 30' ROW
 - Please provide the planned cross-section for these roads.
 - Parking will not be allowed on these roads
- Street A
 - Please provide the planned cross-section for this road.
- There is concern that the driveway cut type might not support emergency vehicles. Please provide additional information for the curb return radii following the Town of Bennett Roadway Design and Construction Standards. Specific locations of concern are shown in Figure 2.

Figure 2: Emergency Vehicle Concerns



- It is recommended to provide landscaping, fencing, or visual barrier at the end of the alleys identified in **Figure 3**.

Figure 3: Visual Barrier for Drivers



- It is recommended to provide landscaping that emergency vehicles can maneuver over as identified in **Figure 4**.

Figure 4: Maneuverable Landscaping for Emergency Vehicles



- In **Figure 5**, Street A shows two 90 degree bends in the road. It is requested that those locations be designed as “Knuckles” 90 degree identified on Drawing 4-41 in the Town of Bennett Roadway Design & Construction Standards.

Figure 5: Required “Knuckles” 90 Degree Road Design



- The Traffic Impact Study (TIS) completed on December 7, 2018, was reviewed and is still viable for this portion of the Bennett Ranch development. The TIS meets the requirements of the Town of Bennett Traffic Study Guidelines.
 - The TIS accounts for 116 multi-family housing units to be built as part of this development and the site now will only include 84 multi-family housing units. This indicates the R-3 Townhomes site traffic will be accommodated within the planned improvements for the overall Bennett Ranch development.



Melinda A. Culley

(303) 298-1601 tel

(303) 298-1627 fax

melinda@kellypc.com

MEMORANDUM

TO: Steve Hebert, Planning & Economic Development Director
Sara Aragon, Community Development Manager

FROM: Melinda Culley /s/

DATE: September 7, 2021

RE: Bennett Ranch Northern Townhomes Plat

I reviewed the plat for Bennett Ranch Northern Townhomes and have the following comments.

Sheet 1

1. The title of the plat should reflect that this is a final plat. Also, consider referring to this subdivision as Bennett Ranch Filing No. 2. The title could read:

Final Plat
Bennett Ranch Filing No. 2
A resubdivision of Tract B, Bennett Ranch Filing No. 1
Town of Bennett, County of Adams, State of Colorado

2. In the Ownership and Dedication block:
 - a. Line 2 – Replace “Replat” with “Final Plat”
 - b. Line 4 – Add the total acreage of the subdivision after the legal description.
 - c. Line 6 – The name of the subdivision should match the name set forth in the title.
3. Plat Note #9 is unclear. Please revise.
4. Remove the Planning and Zoning Commission Approval block.

BENNETT SCHOOL DISTRICT 29J

Sept 2, 2021

Town of Bennett
207 Muegge Way
Bennett, CO 80102

RE: Case No. 21.26 – Bennett Ranch North R-3 Townhomes Final Plat

Dear Steve;

Bennett School District 29J is pleased to review the final plat proposal for Bennett Ranch North R-3 Townhomes. The application is for 8.9 acres of land being platted for 84 townhomes at a density of 9.43 du/acres.

The Application proposes residential development for property located within the School District's boundaries and, therefore, will have an impact on the School District's responsibility to provide adequate school facilities. Consequently, the School Dedication requirements must be met per Division 5 of the Bennett Municipal Code. Based upon this proposal, we calculate the following dedication requirements:

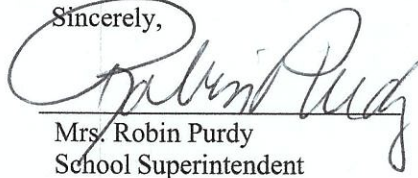
Housing Unit Type	Density	Number of Dwelling Units	Elementary		Middle		High		Total	
			Gen Rate	Students	Gen Rate	Students	Gen Rate	Students	Gen Rate	Students
SFD	0-7.49 du/ac		0.36	0	0.18	0	0.24	0	0.775	0
MF/Mid Density	7.5-14.99 du/ac	84	0.17	14.28	0.08	6.72	0.11	9.24	0.364	30.58
MF/High Density	15 du/ac +		0.09		0.04		0.06		0.195	

Acres per Student	Elementary		Middle		High		Total		Cash-in-lieu
	Number Students	Acres	Number Students	Acres	Number Students	Acres	Number Students	Acres	
0.0597	14.28	0.85	6.72	0.40	9.24	0.55	30.24	1.83	\$82,142.42

Based upon these above calculations, the School District is requesting a cash-in-lieu payment of \$82,142.42 in one lump sum at the time of final plat approval. A lump sum payment is acceptable at the time of the first building permit.

The School District respectfully requests the opportunity to amend and supplement this letter, as appropriate, to update the Town Planning Department and the Subdivision Agreement concerning cash in-lieu payment as a way to mitigate the impact the development will have on the schools. The District looks forward to working with the Town and developer to address the dedication as they move through the site planning and platting process.

Sincerely,


Mrs. Robin Purdy
School Superintendent


Mr. Keith Yaich
Chief Financial Officer

615 7th Street Bennett, CO 80102

303-644-3234 PHONE 303-644-4121 FAX

Keithy@bsd29j.com

www.bsd29j.com



Steve Hebert <shebert@bennett.co.us>

FW: Bennett Ranch - R-3 Northern Townhomes

1 message

Daniel Giroux <dangiroux@terramax.us>

Mon, Sep 13, 2021 at 7:56 AM

To: Town of Bennett Planning <planning@bennett.co.us>

Cc: Sara Aragon <saragon@bennett.co.us>, Steve Hebert <shebert@bennett.co.us>

This should be included in the review comments for the Bennett Ranch North Townhome Final Plat.

Thank you,

Dan

Daniel P. Giroux, PE

President

Terramax, Inc.**Consulting | Engineering**

303-929-3194

From: Caleb Connor <CalebConnor@BennettFireRescue.org>**Date:** Monday, September 13, 2021 at 7:52 AM**To:** Daniel Giroux <dangiroux@terramax.us>, Victoria Flamini <VictoriaFlamini@BennettFireRescue.org>**Subject:** FW: Bennett Ranch - R-3 Northern Townhomes

I attached a couple notes here to point out some "dry areas" I'd like them to address. Additionally, the exhibit needs to show the distances between hydrants before we can "formally" review/approve it.

- Caleb

From: Victoria Flamini <VictoriaFlamini@BennettFireRescue.org>**Sent:** Friday, September 10, 2021 12:05 PM**To:** 'Farrell, Trey' <Trey.Farrell@kimley-horn.com>**Cc:** Daniel Giroux <dangiroux@terramax.us>; Renner, Gabrielle <Gabrielle.Renner@wilsonco.com>;
calebconnor@bennettfirerescue.org**Subject:** Bennett Ranch - R-3 Northern Townhomes**Page 50**

Hi Trey,

We were discussing the final plat for Bennett Ranch Northern Townhomes, so I wanted to just send some information for you to consider. Just like you did for Phase I, we will need a site overview and fire hydrant model exhibit demonstrating the placement and distances of all fire hydrants throughout the development, which we will review for IFC Appendix C compliance. It appears that the current utility plans show all the water lines running through the alley's and there is sort of a "dry zone" in the middle of the development area, for lack of a better term. It would be beneficial to review what is planned for hydrant coverage earlier in case modifications are needed for adequate coverage, so I wanted to reach out to you now to raise these flags.

Additionally, the proposed development has streets/alleys/parking lot areas that to serve the proposed townhomes. BWFR will need to see a modeling exhibit based on fire apparatus design criteria showing adequate widths and turning radius to the proposed development. BWFR also may require specific areas be identified as "fire lanes" which must comply with IFC requirements (i.e. no parking in the alleys). I have attached a document for you to look at for modeling, as I am not sure if it has been provided to you before.

Let me know if you have any questions.

Thanks,

Victoria



Victoria Flamini

**Life Safety Division | Fire Inspector I
Fire & Life Safety Educator**

Bennett-Watkins Fire Rescue

303-644-3572 – Headquarters (x1673)

303-815-8350 – Cell

720-893-7673 – Direct

303-644-3401 – Fax

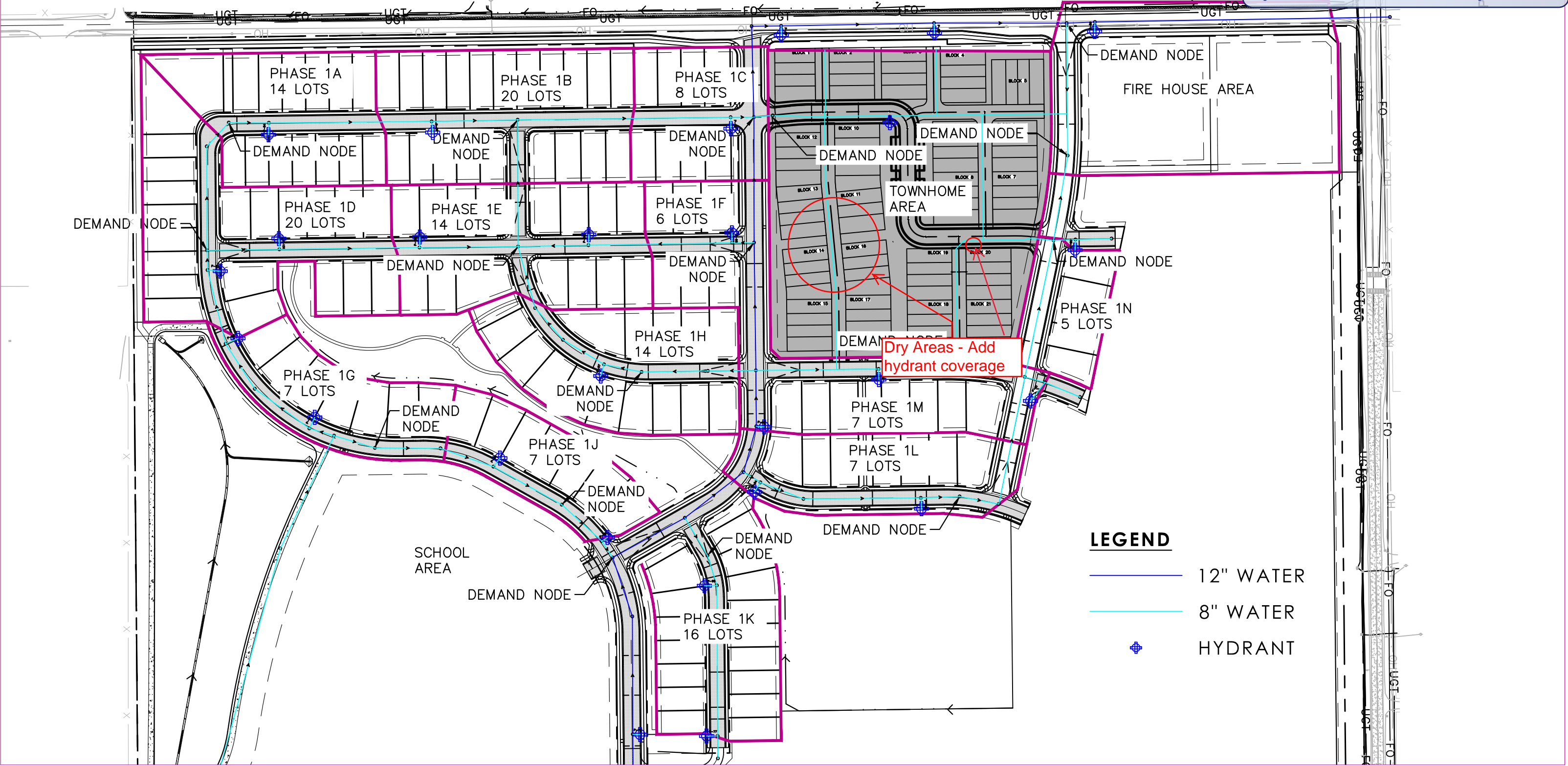
www.BennettFireRescue.org

COVID-19: No contact options for conducting business with the District are available. Payments and submittal documents can be deposited in the front door mail slot. Staff can provide assistance by phone and can complete many tasks through email. We also have information and a variety of forms available on our website www.bennettfirerescue.org to further assist you. We appreciate your patience and support during this time.

This email and any files transmitted with it may contain PRIVILEGED or CONFIDENTIAL information and may be read or used only by the intended recipient. If you are not the intended recipient of the email or any of its attachments, please be advised that you have received this email in error and that any use, dissemination, distribution, forwarding, printing, or copying of this email or any attached files is strictly prohibited. If you have received this email in error, please immediately purge it and all attachments and notify the sender by reply email or contact the sender at the number listed.



Water System Layout B-Ranch N Townhomes - 1st Submittal - Hydrants.pdf
704K

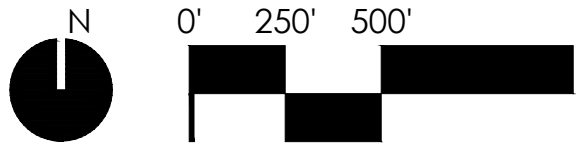


BENNETT RANCH

BENNETT, CO

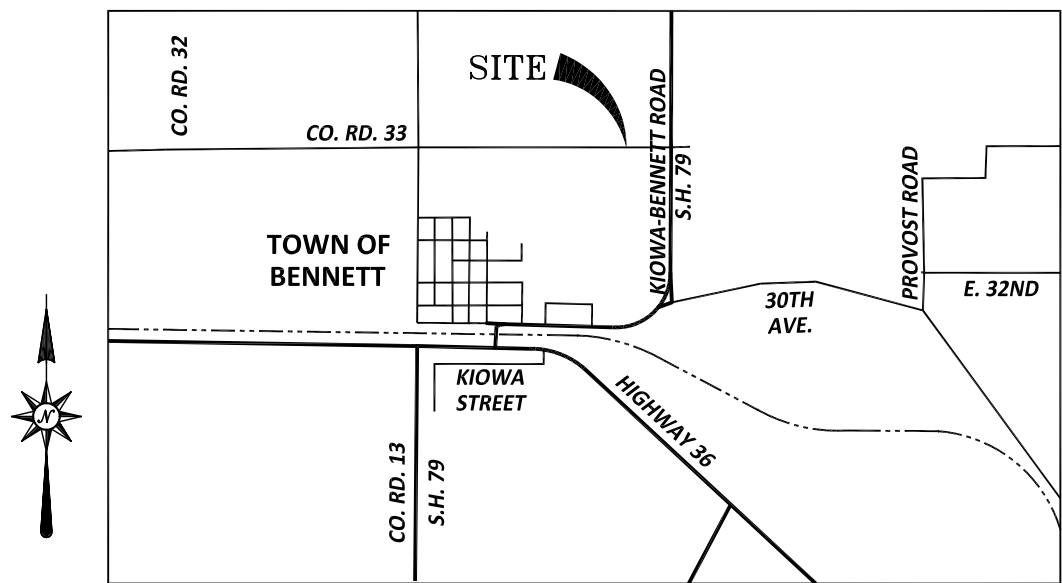
BENNETT NORTH TOWNHOMES WATER LAYOUT

07/12/2021 | CREATED BY: LNS | SCALE: 1"=500'



Kimley»Horn

REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



VICINITY MAP
1"=4000'

OWNERSHIP AND DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED, LGI HOMES INC. BEING THE OWNER OF THE LAND SHOWN IN THIS REPLAT AND DESCRIBED AS FOLLOWS:

TRACT B, BENNETT RANCH – FILING NO. 1 IN THE NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH P.M., COUNTY OF ADAMS, STATE OF COLORADO.

HAS LAID OUT, SUBDIVIDED AND PLATTED SAID LAND AS PER DRAWING HEREON CONTAINED UNDER THE NAME AND STYLE OF BENNETT RANCH –FILING NO. 1, A SUBDIVISION OF A PART OF THE TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO, AND BY THESE PRESENTS DOES HEREBY DEDICATE TO THE TOWN OF BENNETT THE STREETS, AVENUES (AND OTHER PUBLIC PLACES, TRACTS/OUTLOTS) AS SHOWN ON THE ACCOMPANYING PLAT FOR THE PUBLIC USE THEREOF FOREVER AND DOES FURTHER DEDICATE TO THE USE OF THE TOWN OF BENNETT AND ALL SERVING PUBLIC UTILITIES (AND OTHER APPROPRIATE ENTITIES) THOSE PORTION OF SAID REAL PROPERTY WHICH ARE SO DESIGNATED AS EASEMENTS AND TRACTS AS SHOWN.

IT IS EXPRESSLY UNDERSTOOD AND AGREED BY THE UNDERSIGNED THAT ALL EXPENSES AND COSTS INVOLVED IN CONSTRUCTING AND INSTALLING SANITARY SEWER SYSTEM WORKS AND LINES, WATER SYSTEM WORKS AND LINES, GAS SERVICE LINES, ELECTRICAL SERVICE WORKS AND LINES, LANDSCAPING, CURBS, GUTTERS, STREET PAVEMENT, SIDEWALKS, AND OTHER SUCH UTILITIES AND SERVICES SHALL BE GUARANTEED AND PAID FOR BY THE SUB-DIVIDER AND ARRANGEMENTS MADE BY THE SUB-DIVIDER, THEREOF WHICH ARE APPROVED BY THE TOWN OF BENNETT, COLORADO, AND SUCH SUMS SHALL NOT BE PAID BY THE TOWN OF BENNETT, AND THAT ANY ITEM SO CONSTRUCTED OR INSTALLED WHEN ACCEPTED BY THE TOWN OF BENNETT SHALL BECOME THE SOLE PROPERTY OF SAID TOWN OF BENNETT, COLORADO, EXCEPT PRIVATE ROADWAY CURBS, GUTTER AND PAVEMENT AND ITEMS OWNED BY MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES, WHICH WHEN CONSTRUCTED OR INSTALLED SHALL REMAIN AND/OR BECOME THE PROPERTY OF SUCH MUNICIPALITY FRANCHISED UTILITIES AND/OR OTHER SERVING PUBLIC ENTITIES AND SHALL NOT BECOME THE PROPERTY OF THE TOWN OF BENNETT, COLORADO.

OWNERSHIP CERTIFICATE

FOR: LGI HOMES INC.

BY: TRAYCE HERRINGTON, Authorized Signatory

NOTARY ACKNOWLEDGEMENT

STATE OF COLORADO)
)SS
COUNTY OF _____)

THE FOREGOING CERTIFICATE OF DEDICATION AND OWNERSHIP WAS ACKNOWLEDGED BEFORE ME
THIS _____ DAY OF _____, 20_____.
WITNESS MY HAND AND OFFICIAL SEAL _____

NOTARY PUBLIC

MY COMMISSION EXPIRES _____
ADDRESS OF NOTARY: _____

PLAT NOTES

1. THIS PLAT CONTAINS 84 MULTI-FAMILY LOTS AND VARIOUS TRACTS, AS SHOWN IN THE TRACT SUMMARY ON SHEET 2 OF THIS PLAT DOCUMENT.
2. THE BENNETT RANCH METROPOLITAN DISTRICT SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR, AS WELL AS MOSQUITO CONTROL, OF PARKS, OPEN SPACE AND TRAILS ON TRACTS B, C, D, E, F AND G.
3. SIGHT VISIBILITY TRIANGLES ARE IMPOSED AT ALL INTERSECT/ON LOCATIONS WITHIN THIS SUBDIVISION. THESE TRIANGLES SHALL CONFORM TO THE TOWN OF BENNETT ROADWAY DESIGN AND CONSTRUCTION STANDARDS, SECTION 4.5.8.1 (E) AND FIGURE 4.2, AS MAY BE AMENDED FROM TIME TO TIME.
4. THE TOWN OF BENNETT IS NOT RESPONSIBLE FOR THE ENFORCEMENT OF PRIVATE COVENANTS, CONDITIONS AND RESTRICTIONS. THE HOMEOWNERS ASSOCIATION SHALL BE CREATED AND IN PLACE PRIOR TO RECORDING OF THIS PLAT.
5. A BLANKET DRAINAGE EASEMENT, EXCLUDING BUILDING FOOTPRINTS AND EXCLUSIVE EASEMENTS, IS HEREBY GRANTED TO AND BETWEEN ALL LOTS WITHIN THE SUBDIVISION FOR THE PURPOSES OF CONVEYING SURFACE AND SUBSURFACE STORMWATER, CONSTRUCTION, MAINTENANCE, REPAIR AND ACCESS TO THE IMPROVEMENTS THE UNDERLYING PROPERTY OWNER OR ASSIGNS WILL BE RESPONSIBLE FOR MAINTENANCE OF THE EASEMENT AREA.
6. FOR SUBDIVISION BOUNDARY MONUMENTATION, MINIMUM STANDARDS FOR MONUMENTS MUST CONFORM TO THE COLORADO REVISED STATUTES 2017, MONUMENTATION OF SUBDIVISIONS, CRS 38-51-105.
7. IF A SUBDIVISION BOUNDARY CORNER FALLS WITHIN DEDICATED STREET RIGHT-OF-WAY, THE MONUMENT SHALL BE PLACED 6-INCHES BELOW THE SURFACE OF THE PAVEMENT IN A MONUMENT BOX. THE TOP OF THE BOX SHALL BE SET FLUSH WITH THE SURFACE OF THE PAVEMENT.
8. NO BUILDING PERMITS WILL BE ISSUED FOR ANY LOT UNTIL ALL PUBLIC IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS, HAVE BEEN COMPLETED AS REQUIRED BY THE SUBDIVISION AGREEMENT.
9. EXPANSIVE SOILS ARE KNOWN TO EXIST ON THE SITE. WHERE THESE CONDITIONS ARE FOUND TO EXIST, THE RECOMMENDATIONS OF A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE FOLLOWED IN THE DESIGN AND CONSTRUCTION OF IMPROVEMENTS, AND FOUNDATIONS AND FOOTINGS FOR STRUCTURES. BOARD OF TRUSTEES APPROVAL ACKNOWLEDGMENT CERTIFICATE BENNETT RANCH LLS METROPOLITAN DISTRICT HEREBY ACKNOWLEDGES AND ACCEPTS ITS PERPETUAL MAINTENANCE RESPONSIBILITIES FOR THE TRACTS SET FORTH ON THIS PLAT.

ADD DEDICATION OF UTILITY EASEMENTS- NON-EXCLUSIVE 5- FOOT, 10-FOOT AND 15-FOOT UTILITY EASEMENTS LOCATED AS SHOWN ARE HEREBY GRANTED FOR THE INSTALLATION, MAINTENANCE, AND OPERATION OF UTILITIES AND DRAINAGE FACILITIES, INCLUDING, BUT NOT LIMITED TO STREET LIGHTS, ELECTRIC LINES, GAS LINES, CABLE TELEVISION LINES, FIBER OPTIC LINES, AND TELEPHONE LINES, AS WELL AS PERPETUAL RIGHT FOR INGRESS AND EGRESS FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF SUCH LINES

THE FIELD SURVEY WAS COMPLETED ON JUNE 10, 2021.

DISTANCES SHOWN HEREIN ARE IN U.S. SURVEY FEET.

STREET "A" SHOWN ON THIS REPLAT IS HEREBY DEDICATED TO THE TOWN OF BENNETT PER THIS REPLAT.

PLANNING AND ZONING COMMISSION APPROVAL

THIS PLAT, TO BE KNOWN AS REPLAT OF BENNETT RANCH – FILING NO. 1, WAS APPROVED BY ACTION OF THE PLANNING AND ZONING COMMISSION OF THE TOWN OF JOHNSTOWN, COLORADO AT A REGULAR MEETING HELD ON THE _____ DAY OF _____, 20_____.

BY: _____
CHAIR, PLANNING AND ZONING COMMISSION

TOWN COUNCIL APPROVAL

THIS PLAT, TO BE KNOWN AS REPLAT OF BENNETT RANCH – FILING NO. 1, IS APPROVED AND ACCEPTED BY THE TOWN OF BENNETT, BY RESOLUTION NUMBER _____, PASSED AND ADOPTED ON FINAL READING AT A REGULAR MEETING OF THE TOWN COUNCIL OF THE TOWN OF JOHNSTOWN, COLORADO HELD ON THE _____ DAY OF _____, 20_____.

BY: _____ MAYOR
ATTEST: _____ TOWN CLERK

SURVEY CERTIFICATION

I, ROBERT DALEY, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT I MADE THE WITHIN AND FOREGOING PLAT AND DESCRIPTION OF THE LAND AS HEREIN DESCRIBED, AND THAT THE LOTS, ANGLES, DISTANCES, AREA AND LOCATION, AS INDICATED ON SAID PLAT AND CONTAINED IN SAID DESCRIPTIONS, ARE TRUE AND CORRECT, TO THE BEST OF MY KNOWLEDGE.

ROBERT DALEY, PLS
COLORADO REG. NO. 35597
FOR AND ON BEHALF OF DALEY LAND SURVEYING, INC.

DISTRICT ACCEPTANCE

THE UNDERSIGNED BENNETT RANCH METROPOLITAN DISTRICT HEREBY ACKNOWLEDGES AND ACCEPTS THE GRANT OF EASEMENTS TO THE UNDERSIGNED AS DESIGNATED AND SHOWN HEREON FOR MAINTENANCE RESPONSIBILITY AS SPECIFIED HEREON.

BENNETT RANCH METROPOLITAN DISTRICT, A QUASI-MUNICIPAL CORPORATION AND POLITICAL SUBDIVISION OF THE STATE OF COLORADO.

NOTICE: _____
BENNETT RANCH LLC

THE FOREGOING WAS ACKNOWLEDGED BEFORE ME BY THIS _____ DAY OF _____, 20_____ BY _____ ACTING IN HIS

CAPACITY AS _____
OF BENNETT RANCH METROPOLITAN DISTRICT, A QUASI-MUNICIPAL CORPORATION AND POLITICAL SUBDIVISION OF THE STATE OF COLORADO

WITNESS MY HAND AND OFFICIAL SEAL _____

MY COMMISSION EXPIRES _____

NOTARY PUBLIC

CLERK AND RECORDER'S CERTIFICATE

DEPOSITED THIS _____ DAY OF _____, 20_____ AT _____ M.,

IN BOOK _____ AT PAGE _____ AS RECEPTION NO. _____

OF THE THE OFFICIAL RECORDS OF WELD COUNTY, COLORADO .

BY: _____
COUNTY CLERK AND RECORDER

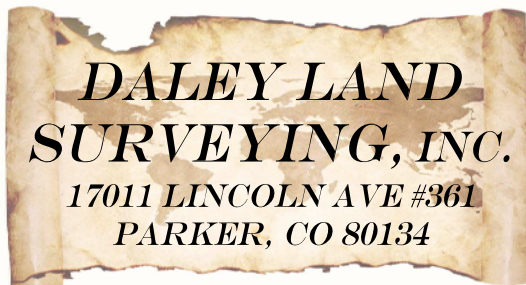
SHEET INDEX

SHEET 1 COVER SHEET
SHEET 2 SHEET INDEX MAP
SHEET 3 BOUNDARY MAP
SHEET 4 PLAN SHEET
SHEET 5 PLAN SHEET

DATE: JULY 23, 2021	REVISIONS		BY	DATE	
					SURVEYED BY: SE
					DRAWN BY: AV
					CHECKED BY: RD
					JOB NUMBER: 1906-006

SHEET 1 OF 5

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B



REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



LAND USE TABLE

TRACT	SQ.FT. (ACRES)	LAND USE	OWNERSHIP / MAINTENANCE
A	3,342 S.F. (0.077)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	BENNETT RANCH METROPOLITAN DISTRICT BENNETT RANCH METROPOLITAN DISTRICT
B	18,902 S.F. (0.434)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
C	14,984 S.F. (0.344)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
D	6,928 S.F. (0.159)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
E	24,508 S.F. (0.563)	OPEN SPACE	
F	17,473 S.F. (0.401)	OPEN SPACE	
G	22,981 S.F. (0.528)	OPEN SPACE	
H	6,883 S.F. (0.158)	OPEN SPACE	
I	8,264 S.F. (0.189)	OPEN SPACE	

LAND USE TABLE

LAND USE	AREA IN ACRES	% OF TOTAL	OWNER / MAINTENANCE
LOTS (84)	5.127	57.49	PRIVATE
TRACTS (9)	2.853	31.99	BENNETT RANCH METROPOLITAN DISTRICT
RIGHT-OF-WAY (STREET A)	0.938	10.52	TOWN OF BENNETT
TOTAL	8.918	100.00	

STREET A AND ALLEY CENTERLINE
LINE AND CURVE TABLES

LINE	BEARING	DISTANCE
CL1	N84°24'22"E	32.62'
CL2	N84°24'22"E	48.98'
CL3	N89°24'22"E	23.62'
CL4	N89°24'22"E	10.01'
CL5	S89°24'22"W	133.03'
CL6	S00°35'38"E	193.95'
CL7	N89°24'22"E	69.97'
CL8	N89°24'22"E	58.03'
CL9	N89°24'22"E	62.72'
CL10	S83°16'22"E	11.14'
CL11	S83°16'22"E	32.62'
CL12	N00°35'38"W	136.09'
CL13	N61°47'47"E	26.46'
CL14	N89°24'22"E	19.19'
CL15	N89°24'22"E	108.04'
CL16	N89°24'22"E	126.79'
CL17	N00°35'38"W	140.06'
CL18	S00°35'38"E	140.11'
CL19	S05°35'38"E	219.52'
CL20	S00°35'38"E	144.08'
CL21	S00°35'38"E	25.80'
CL22	S00°35'38"E	264.92'
CL23	S00°35'38"E	255.87'
CL24	S00°35'38"E	25.03'

STREET A RIGHT OF WAY LINE
AND CURVE TABLES

LINE	BEARING	DISTANCE
ROWL1	N84°24'22"E	24.96'
ROWL2	N89°24'22"E	8.62'
ROWL3	N89°24'22"E	30.00'
ROWL4	N89°24'22"E	96.00'
ROWL5	N89°24'22"E	15.00'
ROWL6	N89°24'22"E	17.04'
ROWL7	S00°35'38"E	193.95'
ROWL8	N89°24'22"E	17.00'
ROWL9	N89°24'22"E	96.00'
ROWL10	N89°24'22"E	30.00'
ROWL11	N89°24'22"E	47.72'
ROWL12	S89°24'22"W	9.74'
ROWL13	S89°24'22"W	96.00'
ROWL14	S89°24'22"W	30.00'
ROWL15	S89°24'22"W	54.97'
ROWL16	N00°35'38"W	193.95'
ROWL17	S89°24'22"W	22.03'
ROWL18	S89°24'22"W	96.00'
ROWL19	S89°24'22"W	30.00'
ROWL20	S89°24'22"W	18.63'
ROWL21	S84°24'22"W	32.84'

TRACT B RIGHT OF WAY LINE
AND CURVE TABLES

LINE	BEARING	DISTANCE
TRBL1	N61°47'47"E	3.30'
TRBL2	N89°24'22"E	96.00'
TRBL3	S89°24'22"W	98.79'
TRBL4	S89°24'22"W	99.23'
TRBL5	S61°47'47"W	3.30'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
TRBC1	19.36'	55.00'	20°09'52"	N71°52'43"E	19.26'
TRBC2	18.74'	13.00'	82°36'10"	N40°39'33"E	17.16'
TRBC3	8.17'	13.00'	36°01'37"	S18°36'27"E	8.04'
TRBC4	12.25'	13.00'	53°58'23"	S63°36'27"E	11.80'
TRBC5	11.05'	13.00'	48°40'51"	S65°03'56"W	10.72'
TRBC6	9.38'	13.00'	41°19'09"	S20°03'56"W	9.17'
TRBC7	9.38'	13.00'	41°19'09"	N21°15'13"W	9.17'
TRBC8	11.05'	13.00'	48°40'51"	N66°15'13"W	10.72'
TRBC9	12.05'	25.00'	27°36'35"	S75°36'04"W	11.93'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
CLC1	43.63'	500.00'	5°00'00"	N86°54'22"E	43.62'
CLC2	40.29'	37.00'	62°23'25"	S59°23'56"E	38.33'
CLC3	17.83'	37.00'	27°36'35"	S14°23'56"E	17.66'
CLC4	58.12'	37.00'	90°00'00"	S45°35'38"E	52.33'
CLC5	38.33'	300.00'	7°19'17"	S86°56'00"E	38.31'
CLC6	19.28'	40.00'	27°36'35"	N75°36'04"E	19.09'
CLC7	18.76'	215.00'	5°00'00"	N03°05'38"W	18.76'
CLC8	1.13'	13.00'	5°00'00"	N03°05'38"W	1.13'

LEGEND

- Right of Way Line
- Lot/Tract Line
- Easement Line
- Centerline

SHEET INDEX

- SHEET 1 COVER SHEET
- SHEET 2 SHEET INDEX MAP
- SHEET 3 BOUNDARY MAP
- SHEET 4 PLAN SHEET
- SHEET 5 PLAN SHEET

DATE:
JULY 23, 2021

REVISIONS

BY

DATE

SURVEYED BY: SE

DRAWN BY: AV

CHECKED BY: RD

JOB NUMBER:
1906-006

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B

DALEY LAND
SURVEYING, INC.
17011 LINCOLN AVE #361
PARKER, CO 80134

REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO

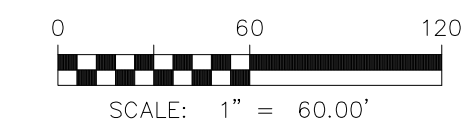
NORTH QUARTER CORNER
SECTION 27
T.3S., R.63W. OF THE 6TH P.M.
CALCULATED FROM FND 30.1' W.C. $\frac{3}{4}$ " ALUM CAP PLS 23519

NORTHEAST CORNER
SECTION 27
T.3S., R.63W. OF THE 6TH P.M.
FND $\frac{3}{4}$ " ALUM CAP PLS 14108



BOUNDARY LEGEND

- FOUND MONUMENT AS NOTED
- POT, POC, DIRECTION CHANGE POINT (NOT TO BE SET)
- ⊗ 1" YELLOW PLASTIC CAP PLS 35597 ON A #4 REBAR TO BE SET
- ◆ FOUND SECTION CORNER AS NOTED



LEGEND

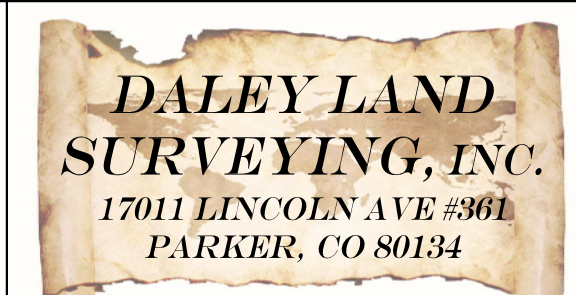
- Right of Way Line
- Lot/Tract Line
- Easement Line
- Centerline

SHEET INDEX

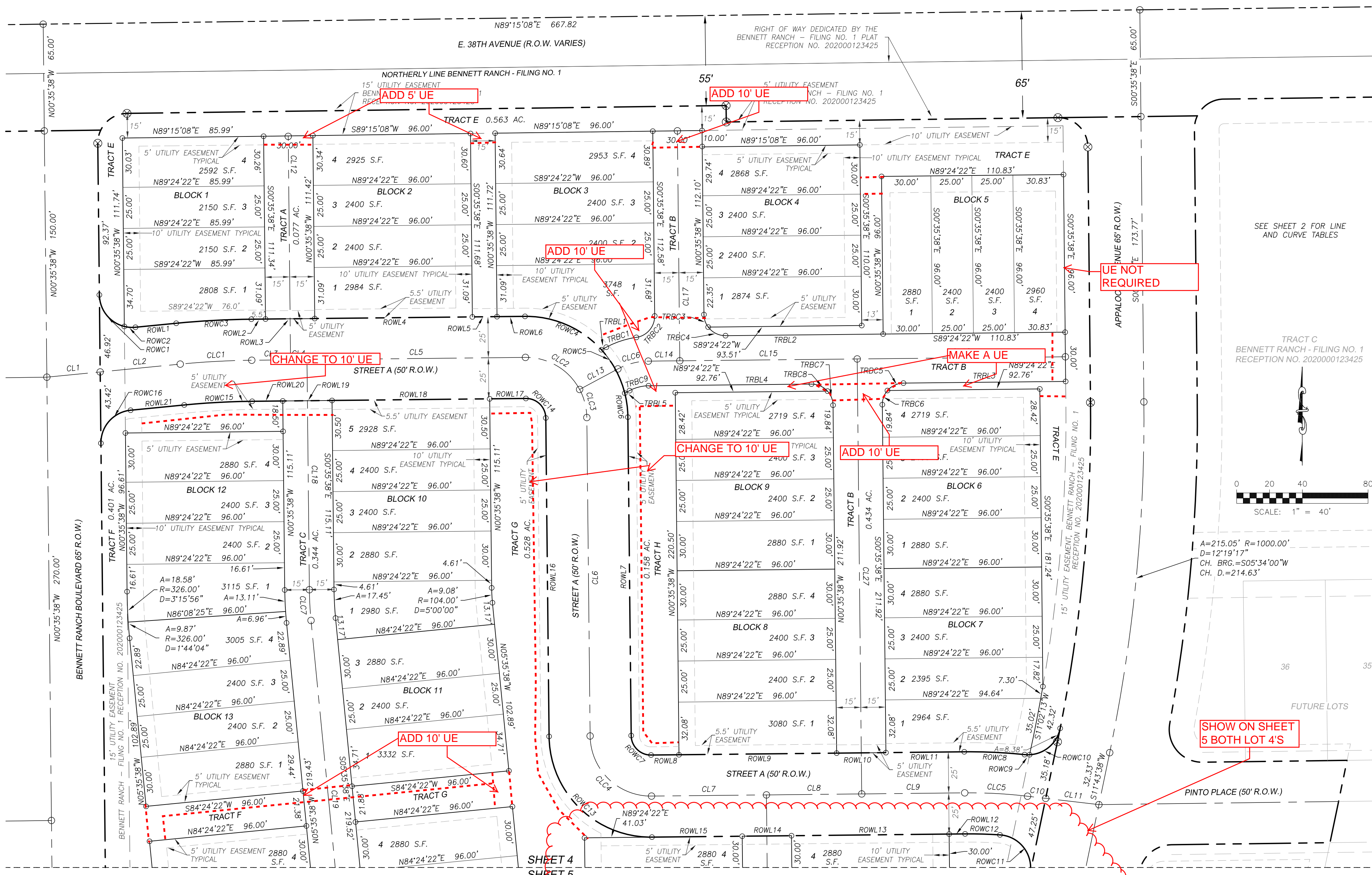
- SHEET 1 COVER SHEET
- SHEET 2 SHEET INDEX MAP
- SHEET 3 BOUNDARY MAP
- SHEET 4 PLAN SHEET
- SHEET 5 PLAN SHEET

DATE:	REVISIONS	BY	DATE	
JULY 23, 2021				SURVEYED BY: SE
				DRAWN BY: AV
				CHECKED BY: RD
				JOB NUMBER: 1906-006
SHEET 3 OF 5				

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B



REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



SHEET INDEX

- SHEET 1 COVER SHEET
- SHEET 2 SHEET INDEX MAP
- SHEET 3 BOUNDARY MAP
- SHEET 4 PLAN SHEET
- SHEET 5 PLAN SHEET

DATE:
JULY 23, 2021

SHEET 4 OF 5

REVISIONS

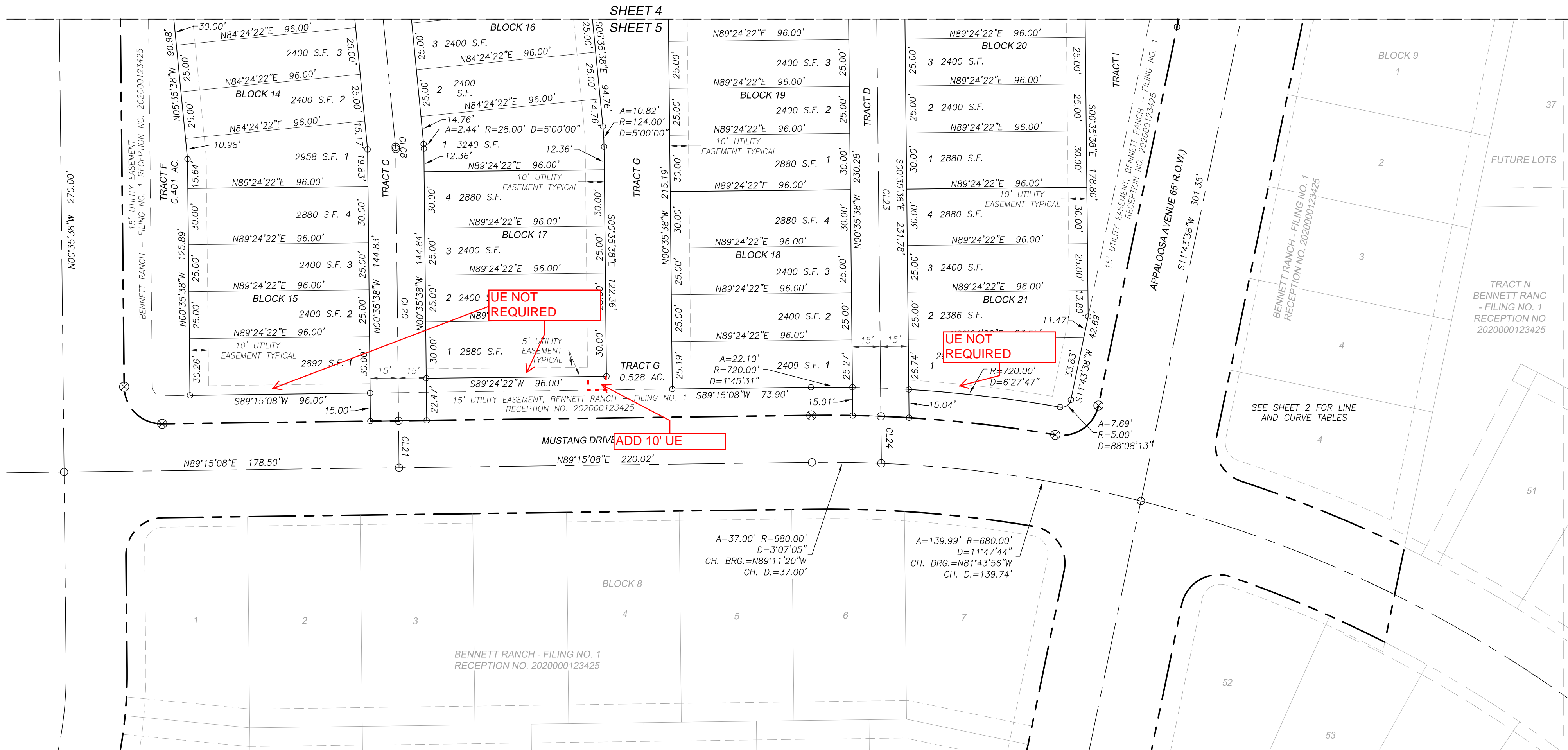
BY	DATE

SURVEYED BY: SE
DRAWN BY: AV
CHECKED BY: RD
JOB NUMBER: 1906-006

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B



REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO

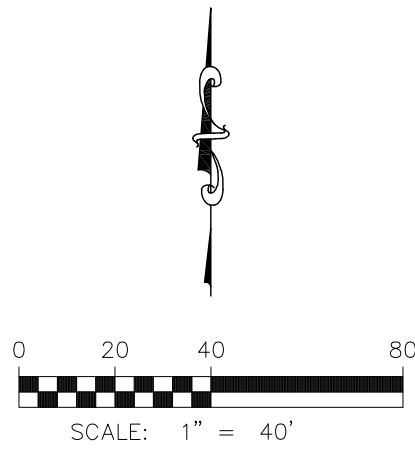


BOUNDARY LEGEND

- FOUND MONUMENT AS NOTED
- POT, POC, DIRECTION CHANGE POINT (NOT TO BE SET)
- ⊗ 1" YELLOW PLASTIC CAP PLS 35597 ON A #4 REBAR TO BE SET
- ◆ FOUND SECTION CORNER AS NOTED

BOUNDARY LEGEND

- EASEMENT LINE
- LOT/TRACT LINE
- SECTION LINE
- CENTERLINE
- RIGHT OF WAY LINE



SHEET INDEX

- SHEET 1 COVER SHEET
- SHEET 2 SHEET INDEX MAP
- SHEET 3 BOUNDARY MAP
- SHEET 4 PLAN SHEET
- SHEET 5 PLAN SHEET

DATE: JULY 23, 2021	REVISIONS	BY	DATE	SURVEYED BY: SE
				DRAWN BY: AV
				CHECKED BY: RD
				JOB NUMBER: 1906-006

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B



5. Replace the Town Council Approval block with the following:

TOWN APPROVAL BLOCK

This is to certify that the Plat of insert subdivision name was approved on the _____ day of _____, 20____ by Resolution No. _____ and that the Mayor of the Town of Bennett on behalf of the Town of Bennett, hereby acknowledges said Plat upon which this certificate is endorsed for all purposes indicated thereon.

Mayor

ATTEST: _____
Town Clerk

6. In the District Acceptance block, add a reference to the tracts that the District is responsible for maintaining by inserting “and tracts” after “easements.”

Sheets 2-4

7. Add the name of Street A to the plat.

REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO



LAND USE TABLE

TRACT	SQ.FT. (ACRES)	LAND USE	OWNERSHIP / MAINTENANCE
A	3,342 S.F. (0.077)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	BENNETT RANCH METROPOLITAN DISTRICT BENNETT RANCH METROPOLITAN DISTRICT
B	18,902 S.F. (0.434)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
C	14,984 S.F. (0.344)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
D	6,928 S.F. (0.159)	PRIVATE ACCESS, UTILITY AND EMERGENCY ACCESS EASEMENT	
E	24,508 S.F. (0.563)	OPEN SPACE	
F	17,473 S.F. (0.401)	OPEN SPACE	
G	22,981 S.F. (0.528)	OPEN SPACE	
H	6,883 S.F. (0.158)	OPEN SPACE	
I	8,264 S.F. (0.189)	OPEN SPACE	

LAND USE TABLE

LAND USE	AREA IN ACRES	% OF TOTAL	OWNER / MAINTENANCE
LOTS (84)	5.127	57.49	PRIVATE
TRACTS (9)	2.853	31.99	BENNETT RANCH METROPOLITAN DISTRICT
RIGHT-OF-WAY (STREET A)	0.938	10.52	TOWN OF BENNETT
TOTAL	8.918	100.00	

STREET A AND ALLEY CENTERLINE
LINE AND CURVE TABLES

LINE	BEARING	DISTANCE
CL1	N84°24'22"E	32.62'
CL2	N84°24'22"E	48.98'
CL3	N89°24'22"E	23.62'
CL4	N89°24'22"E	10.01'
CL5	S89°24'22"W	133.03'
CL6	S00°35'38"E	193.95'
CL7	N89°24'22"E	69.97'
CL8	N89°24'22"E	58.03'
CL9	N89°24'22"E	62.72'
CL10	S83°16'22"E	11.14'
CL11	S83°16'22"E	32.62'
CL12	N00°35'38"W	136.09'
CL13	N61°47'47"E	26.46'
CL14	N89°24'22"E	19.19'
CL15	N89°24'22"E	108.04'
CL16	N89°24'22"E	126.79'
CL17	N00°35'38"W	140.06'
CL18	S00°35'38"E	140.11'
CL19	S05°35'38"E	219.52'
CL20	S00°35'38"E	144.08'
CL21	S00°35'38"E	25.80'
CL22	S00°35'38"E	264.92'
CL23	S00°35'38"E	255.87'
CL24	S00°35'38"E	25.03'

Town to confirm if we
will accept as a public
street.

STREET A RIGHT OF WAY LINE
AND CURVE TABLES

LINE	BEARING	DISTANCE
ROWL1	N84°24'22"E	24.96'
ROWL2	N89°24'22"E	8.62'
ROWL3	N89°24'22"E	30.00'
ROWL4	N89°24'22"E	96.00'
ROWL5	N89°24'22"E	15.00'
ROWL6	N89°24'22"E	17.04'
ROWL7	S00°35'38"E	193.95'
ROWL8	N89°24'22"E	17.00'
ROWL9	N89°24'22"E	96.00'
ROWL10	N89°24'22"E	30.00'
ROWL11	N89°24'22"E	47.72'
ROWL12	S89°24'22"W	9.74'
ROWL13	S89°24'22"W	96.00'
ROWL14	S89°24'22"W	30.00'
ROWL15	S89°24'22"W	54.97'
ROWL16	N00°35'38"W	193.95'
ROWL17	S89°24'22"W	22.03'
ROWL18	S89°24'22"W	96.00'
ROWL19	S89°24'22"W	30.00'
ROWL20	S89°24'22"W	18.63'
ROWL21	S84°24'22"W	32.84'

TRACT B RIGHT OF WAY LINE
AND CURVE TABLES

LINE	BEARING	DISTANCE
TRBL1	N61°47'47"E	3.30'
TRBL2	N89°24'22"E	96.00'
TRBL3	S89°24'22"W	98.79'
TRBL4	S89°24'22"W	99.23'
TRBL5	S61°47'47"W	3.30'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
TRBC1	19.36'	55.00'	20°09'52"	N71°52'43"E	19.26'
TRBC2	18.74'	13.00'	82°36'10"	N40°39'33"E	17.16'
TRBC3	8.17'	13.00'	36°01'37"	S18°36'27"E	8.04'
TRBC4	12.25'	13.00'	53°58'23"	S63°36'27"E	11.80'
TRBC5	11.05'	13.00'	48°40'51"	S65°03'56"W	10.72'
TRBC6	9.38'	13.00'	41°19'09"	S20°03'56"W	9.17'
TRBC7	9.38'	13.00'	41°19'09"	N21°15'13"W	9.17'
TRBC8	11.05'	13.00'	48°40'51"	N66°15'13"W	10.72'
TRBC9	12.05'	25.00'	27°36'35"	S75°36'04"W	11.93'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
CLC1	43.63'	500.00'	5°00'00"	N86°54'22"E	43.62'
CLC2	40.29'	37.00'	62°23'25"	S59°23'56"E	38.33'
CLC3	17.83'	37.00'	27°36'35"	S14°23'56"E	17.66'
CLC4	58.12'	37.00'	90°00'00"	S45°35'38"E	52.33'
CLC5	38.33'	300.00'	7°19'17"	S86°56'00"E	38.31'
CLC6	19.28'	40.00'	27°36'35"	N75°36'04"E	19.09'
CLC7	18.76'	215.00'	5°00'00"	N03°05'38"W	18.76'
CLC8	1.13'	13.00'	5°00'00"	N03°05'38"W	1.13'

LEGEND

- Right of Way Line
- Lot/Tract Line
- Easement Line
- Centerline

SHEET INDEX

SHEET 1 COVER SHEET
SHEET 2 SHEET INDEX MAP
SHEET 3 BOUNDARY MAP
SHEET 4 PLAN SHEET
SHEET 5 PLAN SHEET

DATE:
JULY 23, 2021

REVISIONS

BY

DATE

SURVEYED BY: SE

DRAWN BY: AV

CHECKED BY: RD

JOB NUMBER:
1906-006

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B

DALEY LAND
SURVEYING, INC.
17011 LINCOLN AVE #361
PARKER, CO 80134

REPLAT OF BENNETT RANCH - FILING NO. 1 - TRACT B
LOCATED IN THE NORTHEAST QUARTER OF SECTION 27,
TOWNSHIP 3 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF BENNETT, COUNTY OF ADAMS, STATE OF COLORADO

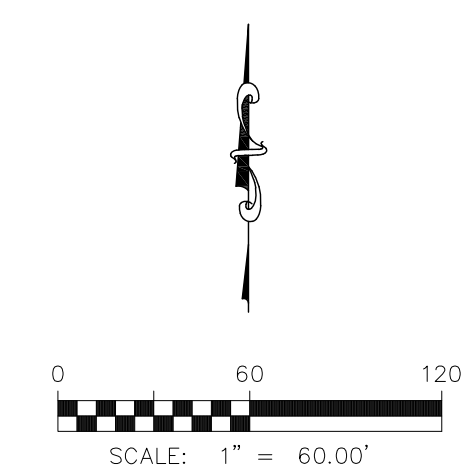
NORTH QUARTER CORNER
SECTION 27
T.3S., R.63W. OF THE 6TH P.M.
CALCULATED FROM FND 30.1' W.C. 3/4" ALUM CAP PLS 23519

NORTHEAST CORNER
SECTION 27
T.3S., R.63W. OF THE 6TH P.M.
FND 3/4" ALUM CAP PLS 14108



BOUNDARY LEGEND

- FOUND MONUMENT AS NOTED
- POT, POC, DIRECTION CHANGE POINT (NOT TO BE SET)
- ⊗ 1" YELLOW PLASTIC CAP PLS 35597 ON A #4 REBAR TO BE SET
- ◆ FOUND SECTION CORNER AS NOTED



LEGEND

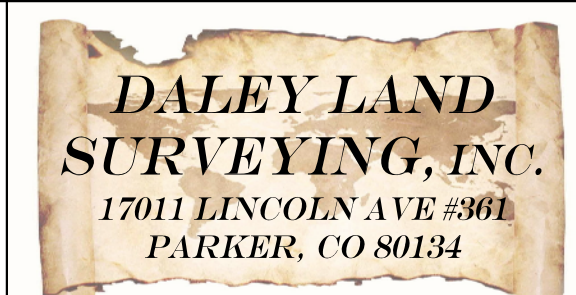
- Right of Way Line
- Lot/Tract Line
- Easement Line
- Centerline

SHEET INDEX

- SHEET 1 COVER SHEET
- SHEET 2 SHEET INDEX MAP
- SHEET 3 BOUNDARY MAP
- SHEET 4 PLAN SHEET
- SHEET 5 PLAN SHEET

DATE: JULY 23, 2021	REVISIONS	BY	DATE	SURVEYED BY: SE
				DRAWN BY: AV
				CHECKED BY: RD
				JOB NUMBER: 1906-006

REPLAT OF
BENNETT RANCH
FILING NO. 1 - TRACT B







December 7, 2018

Mr. Michael Blumenthal
Bennett Ranch, LLC
17 Beacon Hill Lane
Greenwood Village, CO 80111

Re: Bennett Ranch
Traffic Impact Analysis
Bennett, CO
LSC #181140

Dear Mr. Blumenthal:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the proposed Bennett Ranch development. As shown on Figure 1, the site is located south of E. 38th Avenue and west of SH 79 (Kiowa-Bennett Road) in Bennett, Colorado.

REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected long-term background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

LAND USE AND ACCESS

The site is proposed to include about 416 single-family dwelling units, about 231 multi-family dwelling units, a 17.68-acre area to be dedicated to the school district, a 15.36-acre park, a 20,000 square-foot fire station, and about 99,600 square feet of retail space. Full movement access points are proposed to E. 38th Avenue and SH 79 (Kiowa-Bennett Road or Palmer Avenue) as shown in the conceptual site plan in Figure 2.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **SH 79 (Kiowa-Bennett Road and/or Palmer Avenue)** is a north-south, two-lane state highway east of the site. South of E. 38th Avenue, it is classified by CDOT as NR-B (Non-Rural Arterial) and as R-B (Rural Highway) north of E. 38th Avenue. The intersection with E. 38th Avenue is stop-sign controlled. The posted speed limit in the vicinity of the site transitions from 35 to 65 mph as the roadway moves from urban to rural. The 2013 *SH 79-Kiowa Bennett Corridor PEL Study* (SH 79 PEL) shows SH 79 being realigned in the future between the site and I-70. The portion south of the site (Palmer Avenue) will likely be turned over to the Town of Bennett with the primary alignment headed south to cross E. Colfax Avenue. Both roadways are assumed to be four-lane roadways adjacent to the site by 2040. All full movement access proposed to SH 79 is consistent with the August, 2018 *SH 79 Access Control Plan* by SM Rocha, LLC.
- **E. 38th Avenue** is an east-west, two-lane gravel collector roadway north of the site. The intersection with SH 79 is stop-sign controlled. No speed limit is posted in the vicinity of the site.

Existing Traffic Conditions

Figure 3 shows the existing lane geometries, traffic controls, posted speed limits, and traffic volumes in the site's vicinity on a typical weekday. The weekday peak-hour traffic volumes and daily traffic counts are from the attached traffic counts conducted by Counter Measures in September and November, 2018.

2023 and 2040 Background Traffic

Figure 4 shows the estimated 2023 background traffic and Figure 5 shows the estimated 2040 background traffic based on an annual growth rate of 2.3 percent on SH 79 at E. 38th Avenue per the SH 79 PEL.

Existing, 2023, and 2040 Background Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for unsignalized intersections.

The intersections in Figures 3, 4, and 5 were analyzed as appropriate to determine the existing, 2023, and 2040 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

- **SH 79 (Kiowa-Bennett Road)/E. 38th Avenue:** All movements at this unsignalized intersection currently operate at LOS "A" during both morning and afternoon peak-hours and are expected to operate at LOS "B" or better through 2040.
- **SH 79 (Palmer Avenue)/Old Victory Road:** All movements at this unsignalized intersection currently operate at LOS "B" or better during both morning and afternoon peak-hours and are expected to do so through 2023. This intersection is expected to be reconfigured by 2040.

- **SH 79 (Kiowa-Bennett Road)/Old Victory Road/Palmer Avenue:** All movements at this future unsignalized intersection are expected to operate at LOS “B” or better through 2040.
- **SH 79 (Palmer Avenue)/Greg’s Place:** All movements at this unsignalized intersection currently operate at LOS “B” or better during both morning and afternoon peak-hours and are expected to do so through 2040.
- **SH 79 (Palmer Avenue)/8th Street:** All movements at this unsignalized intersection currently operate at LOS “C” or better during both morning and afternoon peak-hours and are expected to operate at LOS “D” or better through 2040.

TRIP GENERATION

Table 2 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed site based on the rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE) for the proposed land use.

The site is projected to generate about 8,147 primary vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 167 vehicles would enter and about 351 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 526 vehicles would enter and about 405 vehicles would exit. This assumes 34 percent of the shopping center land use trips are pass-by trips.

TRIP DISTRIBUTION

Figure 6 shows the estimated 2023 and 2040 directional distribution of the site-generated traffic volumes on the area roadways. The estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site’s proposed land use.

TRIP ASSIGNMENT

Figure 7a shows the estimated 2023 primary site-generated traffic volumes based on the 2023 directional distribution percentages (from Figure 6) and the primary trip generation estimate (from Table 2).

Figure 7b shows the estimated 2040 primary site-generated traffic volumes based on the 2040 directional distribution percentages (from Figure 6) and the primary trip generation estimate (from Table 2).

Figures 8a and 8b show the estimated 2023 and 2040 pass-by site-generated traffic volumes.

2023 AND 2040 TOTAL TRAFFIC

Figure 9 shows the 2023 total traffic which is the sum of 2040 background traffic volumes (from Figure 4) and the 2023 site-generated traffic volumes (from Figures 7a and 8a). Figure 9 also shows the recommended 2023 lane geometry and traffic control.

Figure 10 shows the 2040 total traffic which is the sum of 2040 background traffic volumes (from Figure 5) and the 2040 site-generated traffic volumes (from Figures 7b and 8b). Figure 10 also shows the recommended 2040 lane geometry and traffic control.

PROJECTED LEVELS OF SERVICE

The intersections in Figures 9 and 10 were analyzed to determine the 2023 and 2040 total levels of service. Table 1 shows the level of service analysis results. The level of service reports are attached.

- **E. 38th Avenue/Northwest Site Access:** All movements at this future unsignalized intersection are expected to operate at LOS “A” during both morning and afternoon peak-hours through 2040.
- **E. 38th Avenue/Northeast Site Access:** All movements at this future unsignalized intersection are expected to operate at LOS “A” during both morning and afternoon peak-hours through 2040.
- **E. 38th Avenue/Fire Station Access:** All movements at this future unsignalized intersection are expected to operate at LOS “A” during both morning and afternoon peak-hours through 2040.
- **SH 79 (Kiowa-Bennett Road)/E. 38th Avenue:** All movements at this unsignalized intersection are expected to operate at LOS “C” or better during both morning and afternoon peak-hours through 2040.
- **SH 79 (Kiowa-Bennett Road)/East Site Access:** All movements at this future unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2040.
- **SH 79 (Kiowa-Bennett Road)/Old Victory Road:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2023. This intersection is expected to be reconfigured by 2040.
- **SH 79 (Kiowa-Bennett Road)/Old Victory Road/Palmer Avenue:** All movements at this future unsignalized intersection are expected to operate at LOS “D” or better during both morning and afternoon peak-hours through 2040 with the exception of the eastbound left-turn movement which is expected to operate at LOS “F” in the 2040 afternoon peak-hour.
- **Palmer Avenue/Southeast Site Access:** All movements at this future unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2040.
- **SH 79 (Kiowa-Bennett Road)/RIRO Commercial Access:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2023 while Palmer Avenue remains under CDOT jurisdiction.

- **SH 79 (Kiowa-Bennett Road)/Full Movement Commercial Access:** All movements at this future unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours in 2040 after Palmer Avenue transitions from CDOT to Town jurisdiction.
- **SH 79 (Kiowa-Bennett Road)/Gregs Place:** All movements at this unsignalized intersection are expected to operate at LOS “C” or better during both morning and afternoon peak-hours through 2040 with the following exception: The southbound left-turn movement will likely operate at LOS “E” during the 2023 afternoon peak-hour prior to SH 79 being relocated away from the Palmer Avenue alignment.
- **SH 79 (Kiowa-Bennett Road)/8th Street:** All movements at this unsignalized intersection are expected to operate at LOS “D” or better during both morning and afternoon peak-hours through 2040 with the following exception: The southbound left-turn movement will likely operate at LOS “E” during both peak-hours prior to SH 79 being relocated away from the Palmer Avenue alignment.

TRAFFIC SIGNAL WARRANT ANALYSIS

Figure 11 shows the 2040 background and total traffic volumes from Figures 5 and 10 for the SH 79/Old Victory Road/Palmer Avenue intersection plotted on a four-hour traffic signal warrant chart. It shows a traffic signal will likely be warranted by 2040.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

1. The site is projected to generate about 8,147 primary vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 167 vehicles would enter and about 351 vehicles would exit the site. During the afternoon peak-hour, about 526 vehicles would enter and about 405 vehicles would exit. This assumes 34 percent of the shopping center trips are pass-by trips.

Projected Levels of Service

2. All movements at the intersections analyzed are expected to operate at LOS “D” or better during both morning and afternoon peak-hours through 2040 with the following exceptions: The southbound left-turn movements from Gregs Place and 8th Street to SH 79 (Palmer Avenue) could operate at LOS “E” by 2023 prior to SH 79 being relocated away from the Palmer Avenue alignment. The eastbound left-turn movement from Palmer Avenue to realigned SH 79 could operate at LOS “F” in the 2040 afternoon peak-hour. Traffic signal control or a left-turn acceleration lane may be needed by 2040.

Conclusions

3. The impact of the Bennett Ranch development can be accommodated by the existing roadway network with the following recommended improvements.

Recommendations

4. CDOT and the Town of Bennett coordinate to realign and widen SH 79 through Bennett as planned in the *SH 79-Kiowa Bennett Corridor PEL Study* between 2023 and 2040.
5. The recommended turn lane lengths for intersections impacted by the site are shown in Figures 9 and 10.
6. The intersection of realigned SH 79 with Old Victory Road and Palmer Avenue may require traffic signal control or an eastbound to northbound left-turn acceleration lane by 2040.

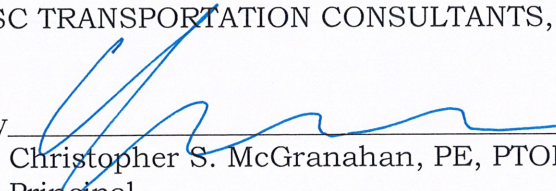
* * * * *

We trust our findings will assist you in gaining approval of the proposed Bennett Ranch development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By


Christopher S. McGranahan, PE, PTOE
Principal



CSM/wc

12-7-18

Enclosures: Tables 1 and 2
Figures 1 - 11
Traffic Count Reports
Level of Service Definitions
Level of Service Reports

Z:\LSC\Projects\2018\181140-BennettRanch\Report\BennettRanch-120718.wpd

Table 1 (Page 1 of 2)
Intersection Levels of Service Analysis
Bennett Ranch
Bennett, CO
LSC #181140; December, 2018

Intersection Location	Traffic Control	Existing Traffic		2023 Background Traffic		2023 Total Traffic		2040 Background Traffic		2040 Total Traffic	
		Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
<u>E. 38th Avenue/Northwest Site Access</u>	TWSC										
NB Approach		--	--	--	--	A	A	--	--	A	A
WB Approach		--	--	--	--	A	A	--	--	A	A
Critical Movement Delay		--	--	--	--	8.7	8.9	--	--	8.9	9.0
<u>E. 38th Avenue/Northeast Site Access</u>	TWSC										
NB Approach		--	--	--	--	A	A	--	--	A	A
WB Approach		--	--	--	--	A	A	--	--	A	A
Critical Movement Delay		--	--	--	--	8.7	8.7	--	--	8.9	8.8
<u>E. 38th Avenue/Fire Station Access</u>	TWSC										
NB Approach		--	--	--	--	A	A	--	--	A	A
WB Approach		--	--	--	--	A	A	--	--	A	A
Critical Movement Delay		--	--	--	--	8.7	8.6	--	--	8.8	8.9
<u>SH 79/E. 38th Avenue</u>	TWSC										
NB Approach		A	A	A	A	--	--	--	--	--	--
NB Left		--	--	--	--	A	A	A	A	A	A
EB Approach		A	A	B	B	B	B	B	B	B	B
WB Approach		A	A	B	B	B	B	B	B	B	C
SB Approach		A	A	A	A	--	--	--	--	--	--
SB Left		--	--	--	--	A	A	A	A	A	A
Critical Movement Delay		9.4	9.1	10.4	11.1	11.0	12.4	11.6	12.7	12.7	15.4
<u>SH 79/East Site Access</u>	TWSC										
NB Left		--	--	--	--	A	A	--	--	A	A
EB Approach		--	--	--	--	B	B	--	--	B	B
Critical Movement Delay		--	--	--	--	10.1	10.1	--	--	10.2	10.0
<u>SH 79 (Palmer Avenue)/Old Victory Road</u>	TWSC										
WB Approach		B	B	B	B	B	B	--	--	--	--
SB Approach		A	A	A	A	A	A	--	--	--	--
Critical Movement Delay		10.5	10.7	10.6	11.5	11.6	13.1	--	--	--	--

Table 1 (Page 2 of 2)
Intersection Levels of Service Analysis
Bennett Ranch
Bennett, CO
LSC #181140; December, 2018

Intersection Location	Traffic Control	Existing Traffic		2023 Background Traffic		2023 Total Traffic		2040 Background Traffic		2040 Total Traffic	
		Level of Service AM	Level of Service PM	Level of Service AM	Level of Service PM	Level of Service AM	Level of Service PM	Level of Service AM	Level of Service PM	Level of Service AM	Level of Service PM
<u>SH 79/Old Victory Rd./Palmer Ave.</u>	TWSC										
NB Left		--	--	--	--	--	--	A	A	A	A
EB Left		--	--	--	--	--	--	B	B	C	F
EB Through/Right		--	--	--	--	--	--	B	B	B	B
WB Left		--	--	--	--	--	--	B	B	C	D
WB Through/Right		--	--	--	--	--	--	B	B	B	C
SB Left		--	--	--	--	--	--	A	A	A	A
Critical Movement Delay		--	--	--	--	--	--	14.4	14.4	22.0	55.5
<u>Palmer Avenue/Southeast Site Access</u>	TWSC										
NB Approach		--	--	--	--	--	--	A	A	B	B
EB Left		--	--	--	--	A	A	--	--	A	A
WB Left		--	--	--	--	--	--	A	A	A	A
SB Approach		--	--	--	--	B	B	--	--	B	B
Critical Movement Delay		--	--	--	--	10.7	13.3	9.6	9.5	11.6	13.3
<u>Palmer Avenue/Commercial Access</u>	TWSC										
EB Left	RIRO in 2023	--	--	--	--	--	--	--	--	A	A
SB Right	Full Move-	--	--	--	--	B	B	--	--	B	B
Critical Movement Delay	ment in 2040	--	--	--	--	10.2	10.4	--	--	10.4	11.4
<u>Palmer Avenue/Greg's Place</u>	TWSC										
EB Approach or Left		A	A	A	A	A	A	A	A	A	A
SB Approach		B	B	B	B	--	--	B	A	--	--
SB Left		--	--	--	--	C	E	--	--	B	B
SB Right		--	--	--	--	B	B	--	--	A	A
Critical Movement Delay		10.5	10.3	10.8	11.1	16.7	44.2	10.2	9.8	12.5	14.6
<u>Palmer Avenue/8th Street</u>	TWSC										
EB Approach or Left		A	A	A	A	B	A	A	A	A	A
SB Left		C	C	D	B	E	E	D	B	D	B
SB Right		B	B	B	B	C	B	A	A	A	A
Critical Movement Delay		23.0	15.9	26.3	14.7	46.4	43.8	26.5	12.9	28.8	14.8

Table 2
ESTIMATED TRAFFIC GENERATION
Bennett Ranch
Bennett, CO
LSC #181140; December 2018

Traffic Analysis		Trip Generation Rates ⁽¹⁾							Vehicle-Trips Generated				
Zone	Trip Generating Category	Quantity	Average Weekday	AM Peak-Hour		PM Peak-Hour		Average Weekday	AM Peak-Hour		PM Peak-Hour		
				In	Out	In	Out		In	Out	In	Out	
A	Single-Family Housing ⁽²⁾	117 DU ⁽³⁾	9.44	0.185	0.555	0.624	0.366	1,104	22	65	73	43	
B	Multi-Family Housing ⁽⁴⁾	116 DU	7.32	0.106	0.354	0.353	0.207	849	12	41	41	24	
C	Fire Station ⁽⁵⁾	20 KSF ⁽⁶⁾	2.40	0.341	0.139	0.139	0.341	48	7	3	3	7	
D	Dedication to School District ⁽⁷⁾	17.68 Acres	--	--	--	--	--	0	0	0	0	0	
E	Park ⁽⁸⁾	15.36 Acres	--	--	--	--	--	0	0	0	0	0	
F	Single-Family Housing	103 DU	9.44	0.185	0.555	0.624	0.366	972	19	57	64	38	
G	Single-Family Housing	96 DU	9.44	0.185	0.555	0.624	0.366	906	18	53	60	35	
H	Single-Family Housing	100 DU	9.44	0.185	0.555	0.624	0.366	944	19	55	62	37	
I	Multifamily Housing	115 DU	7.32	0.106	0.354	0.353	0.207	842	12	41	41	24	
J	Shopping Center ⁽⁹⁾	99.6 KSF	37.75	0.583	0.357	1.829	1.981	3,760	58	36	182	197	
Total =								9,425	167	351	526	405	
Passby Trips ⁽¹⁰⁾ =								1,278	16	16	64	64	
Primary Trips =								8,147	151	335	462	341	

Notes:

- (1) Source: *Trip Generation*, Institute of Transportation Engineers, 10th Edition, 2017.
- (2) ITE Land Use No. 210 - Single-Family Detached Housing
- (3) DU = Dwelling Unit
- (4) ITE Land Use No. 220 - Multifamily Housing (Low-Rise)
- (5) ITE Land Use No. 575 - Fire and Rescue Station; weekday average was assumed to be 5x the PM Peak and AM Peak is the reverse of the PM Peak
- (6) KSF = 1,000 square feet
- (7) Land to be dedicated to the School District to add to the overall campus to the west of the site. This estimate may need to be updated once the proposed use for the school site is more defined.
- (8) Public Park
- (9) ITE Land Use No. 820 - Shopping Center; a FAR of 0.30 was assumed on 7.62 acres.
- (10) A passby trip rate of 34 percent was assumed for the shopping center use.



Figure 1

Vicinity Map

Bennett Ranch (LSC #181140)



Existing Full Movement Access

Proposed RIRO Access (2023)

Proposed Full Movement Access (2040)

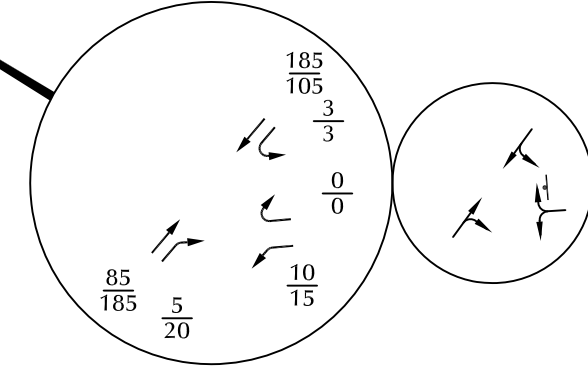
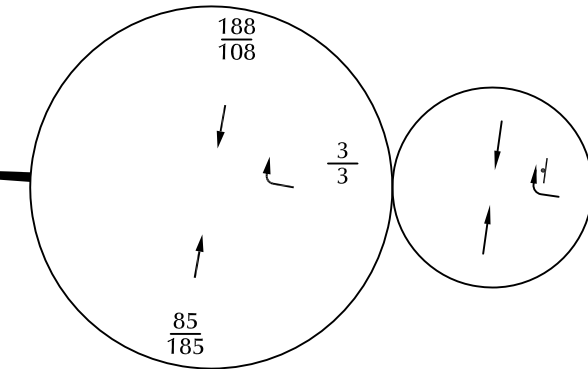
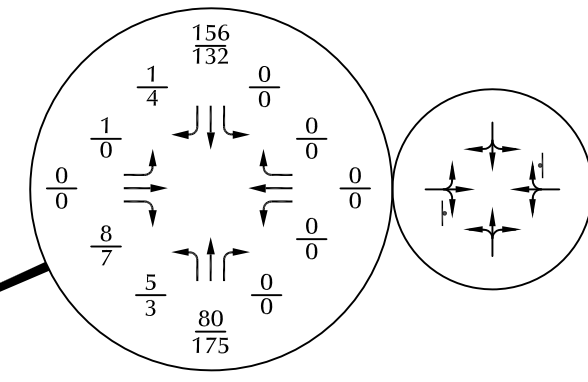
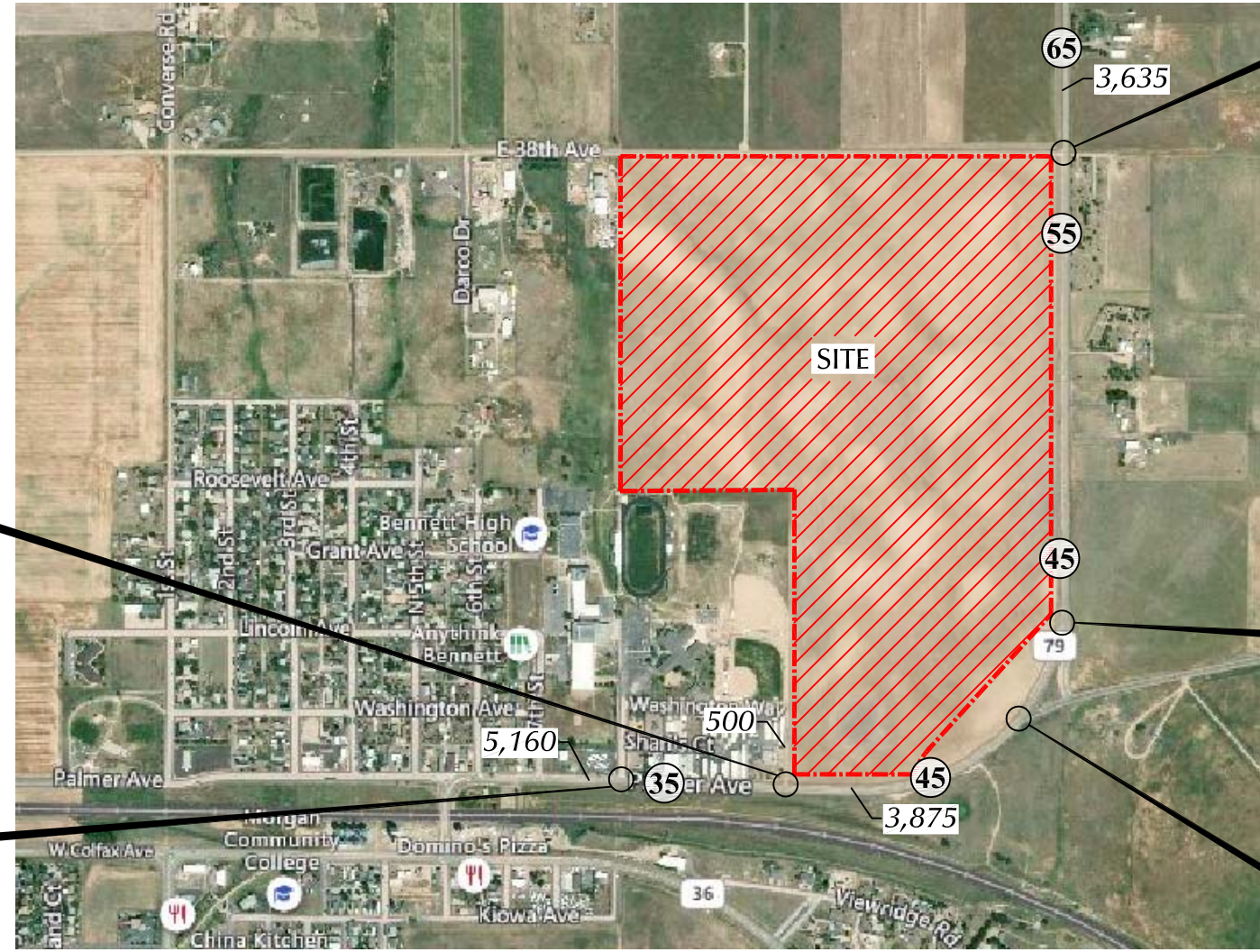
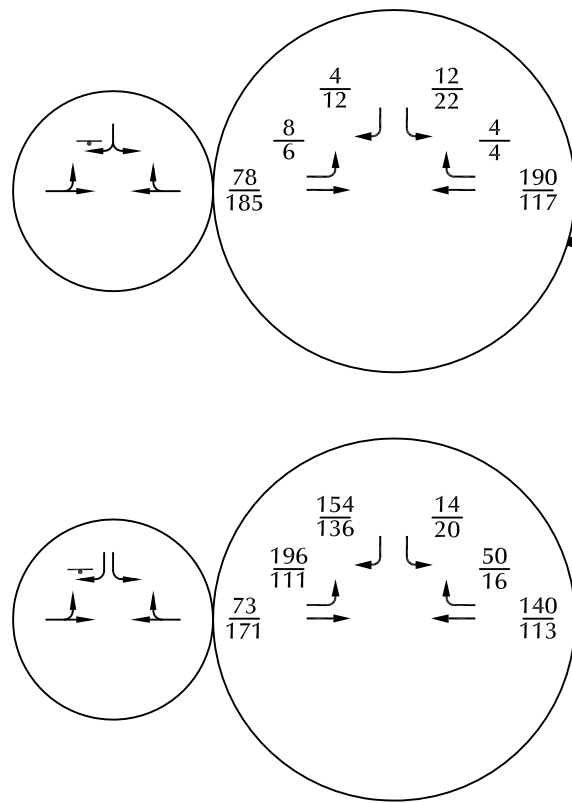
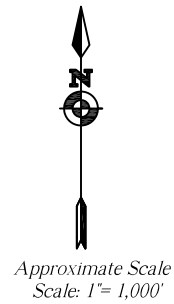
Proposed Full Movement Access

Figure 2

Site Plan

Note: Full Movement Access locations to SH 79 are consistent with the August, 2018 SH 79 Access Control Plan.

Bennett Ranch (LSC #181140)

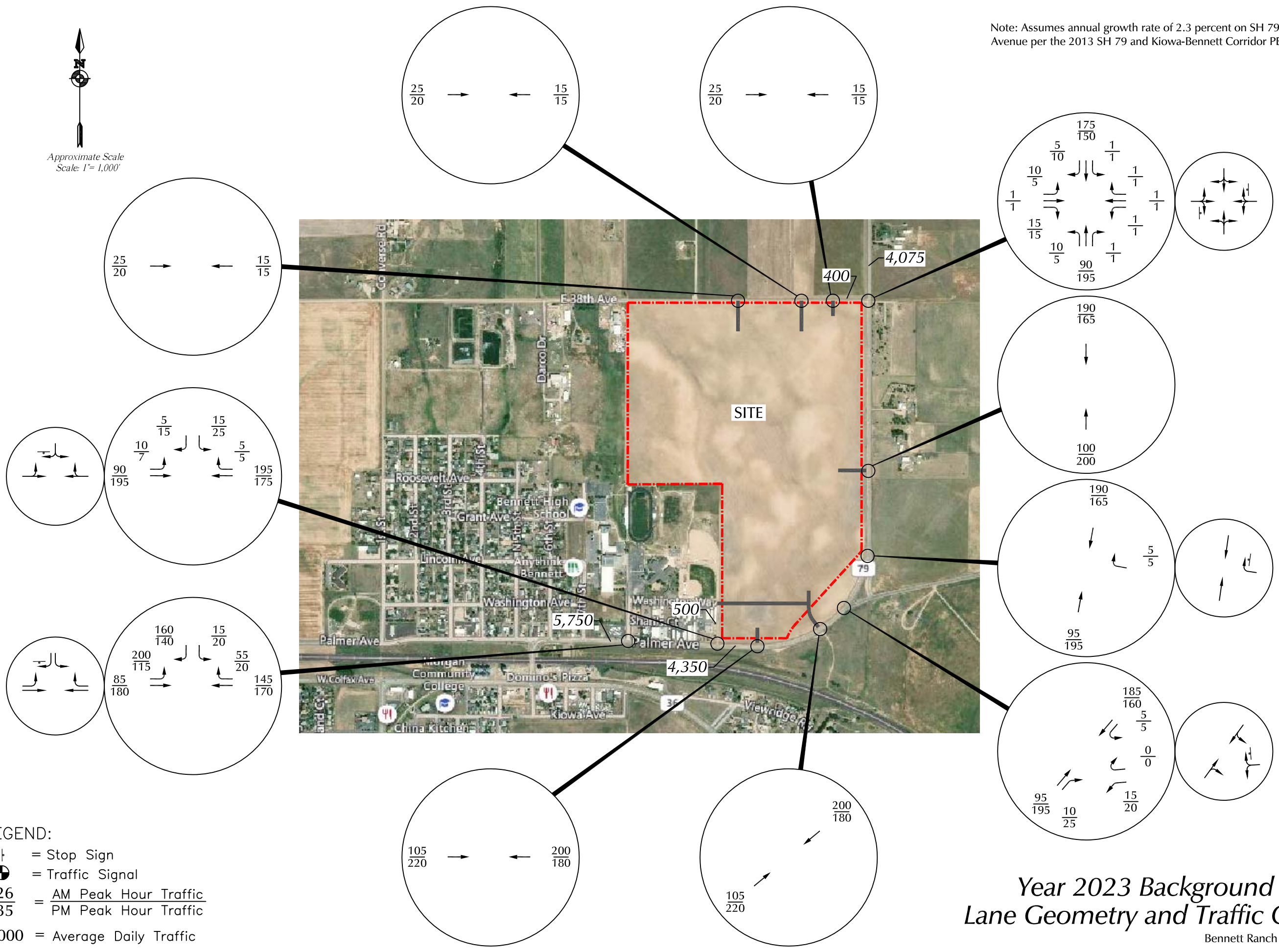
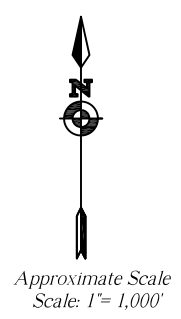


- LEGEND:
- ⊥ = Stop Sign
 - 30 = Speed Limit
 - $\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$
 - 1,000 = Average Daily Traffic



Figure 3
**Existing Traffic,
Lane Geometry and Traffic Control**
Bennett Ranch (LSC #181140)

Note: Assumes annual growth rate of 2.3 percent on SH 79 at E. 38th Avenue per the 2013 SH 79 and Kiowa-Bennett Corridor PEL Study.



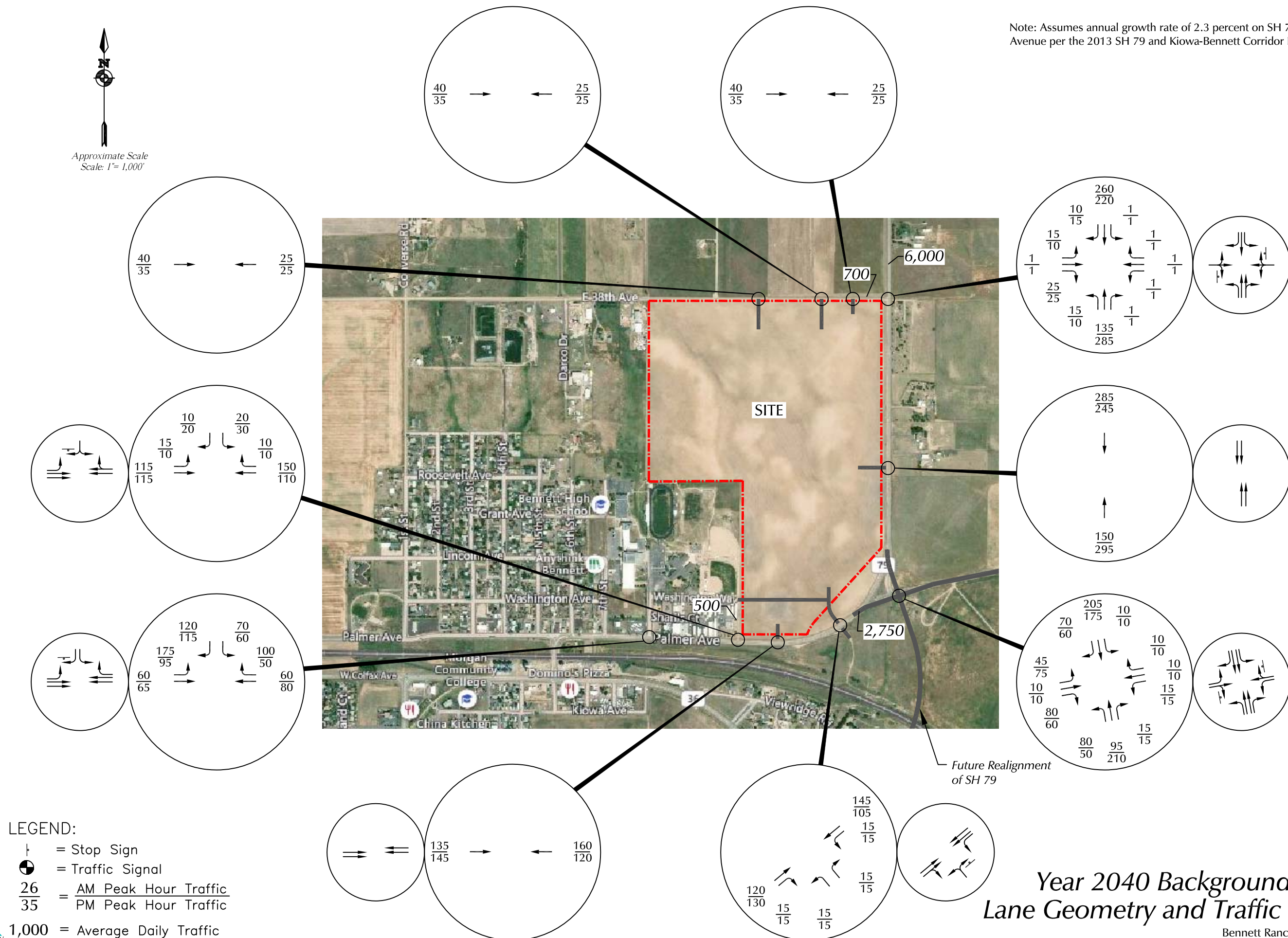
LEGEND:

- = Stop Sign
- = Traffic Signal
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic



Figure 4
**Year 2023 Background Traffic,
Lane Geometry and Traffic Control**
Bennett Ranch (LSC #181140)

Note: Assumes annual growth rate of 2.3 percent on SH 79 at E. 38th Avenue per the 2013 SH 79 and Kiowa-Bennett Corridor PEL Study.





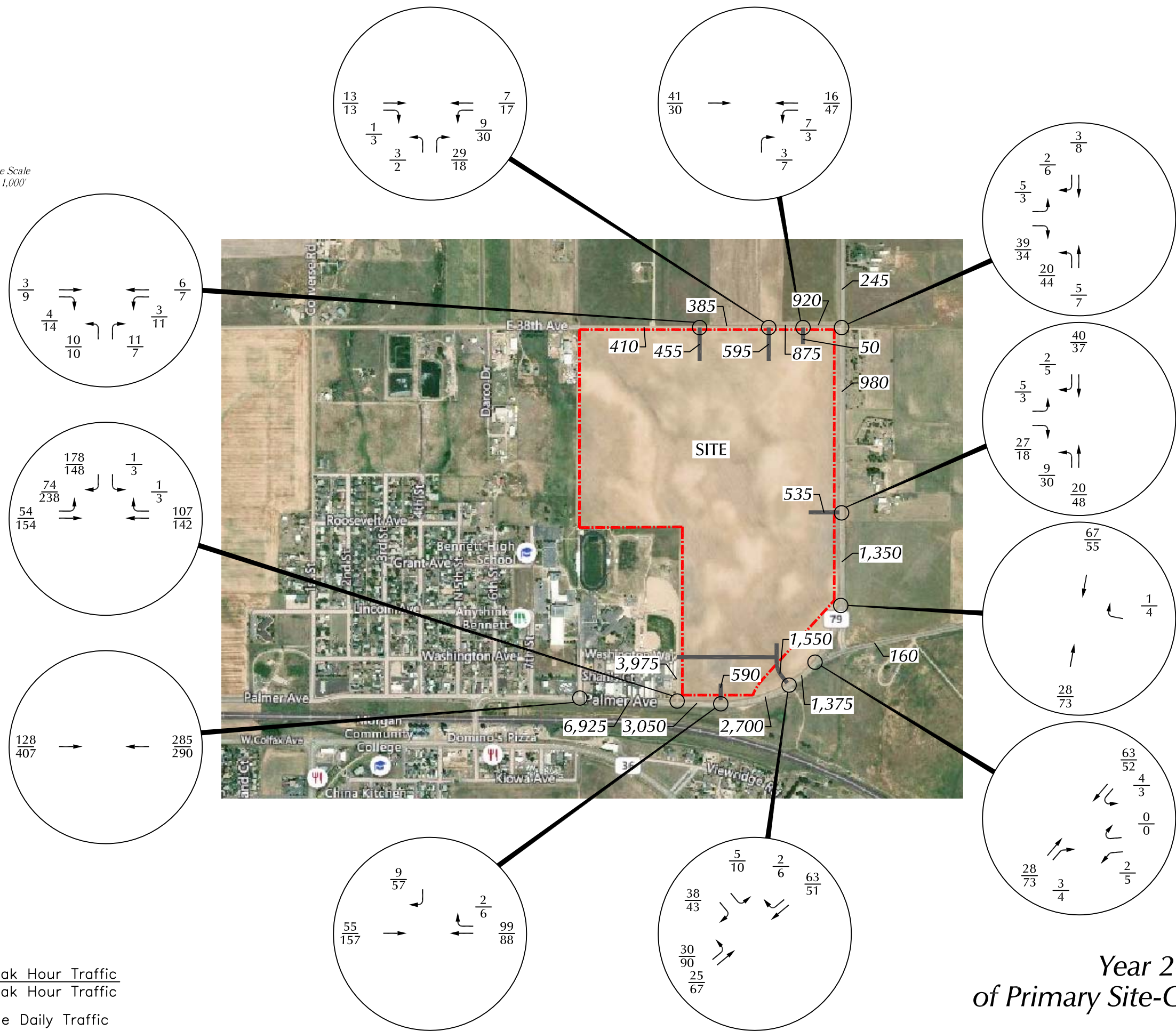
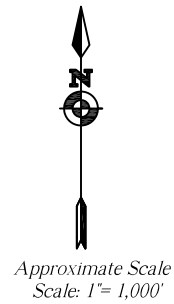
LEGEND:

$\frac{5\%}{5\%}$ = $\frac{2023 \text{ Percent Directional Distribution}}{2040 \text{ Percent Directional Distribution}}$

*Directional Distribution
of Site-Generated Traffic*

Bennett Ranch (LSC #181140)

Figure 6



LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 = PM Peak Hour Traffic
1,000 = Average Daily Traffic



Figure 7a
**Year 2023 Assignment
of Primary Site-Generated Traffic**
Bennett Ranch (LSC #181140)

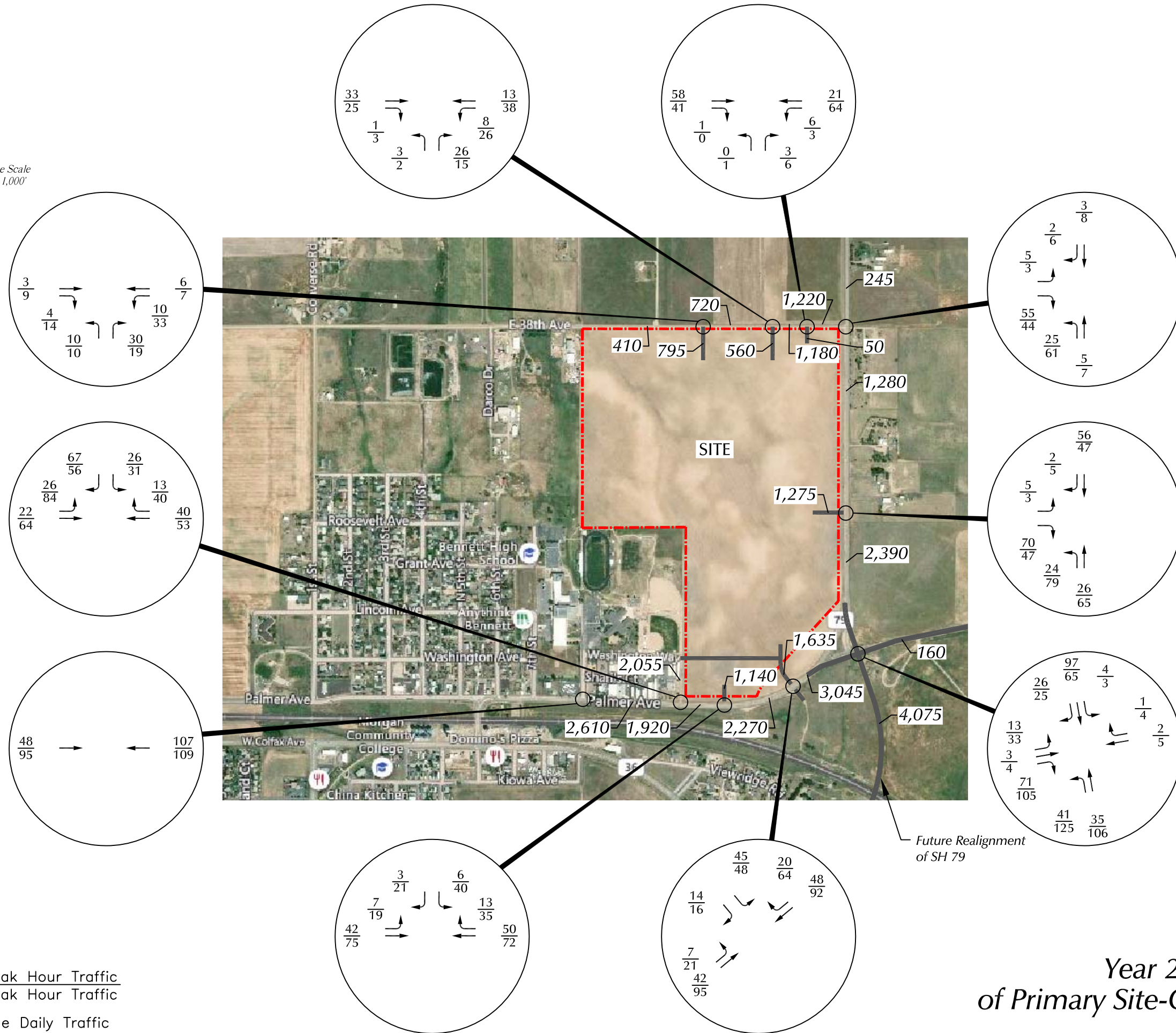
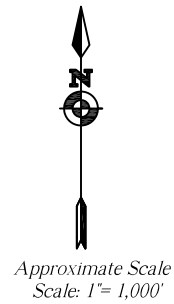
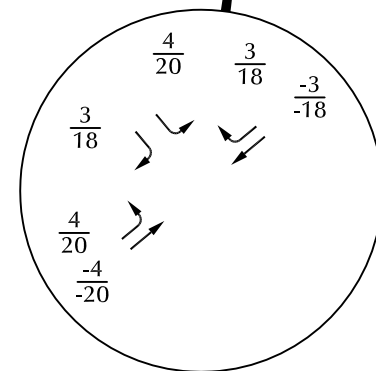
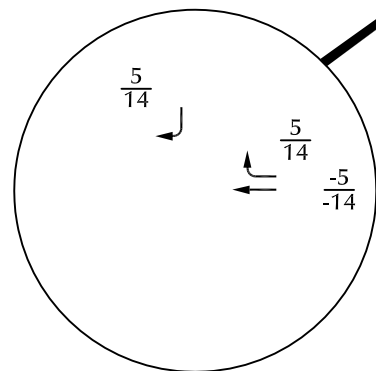
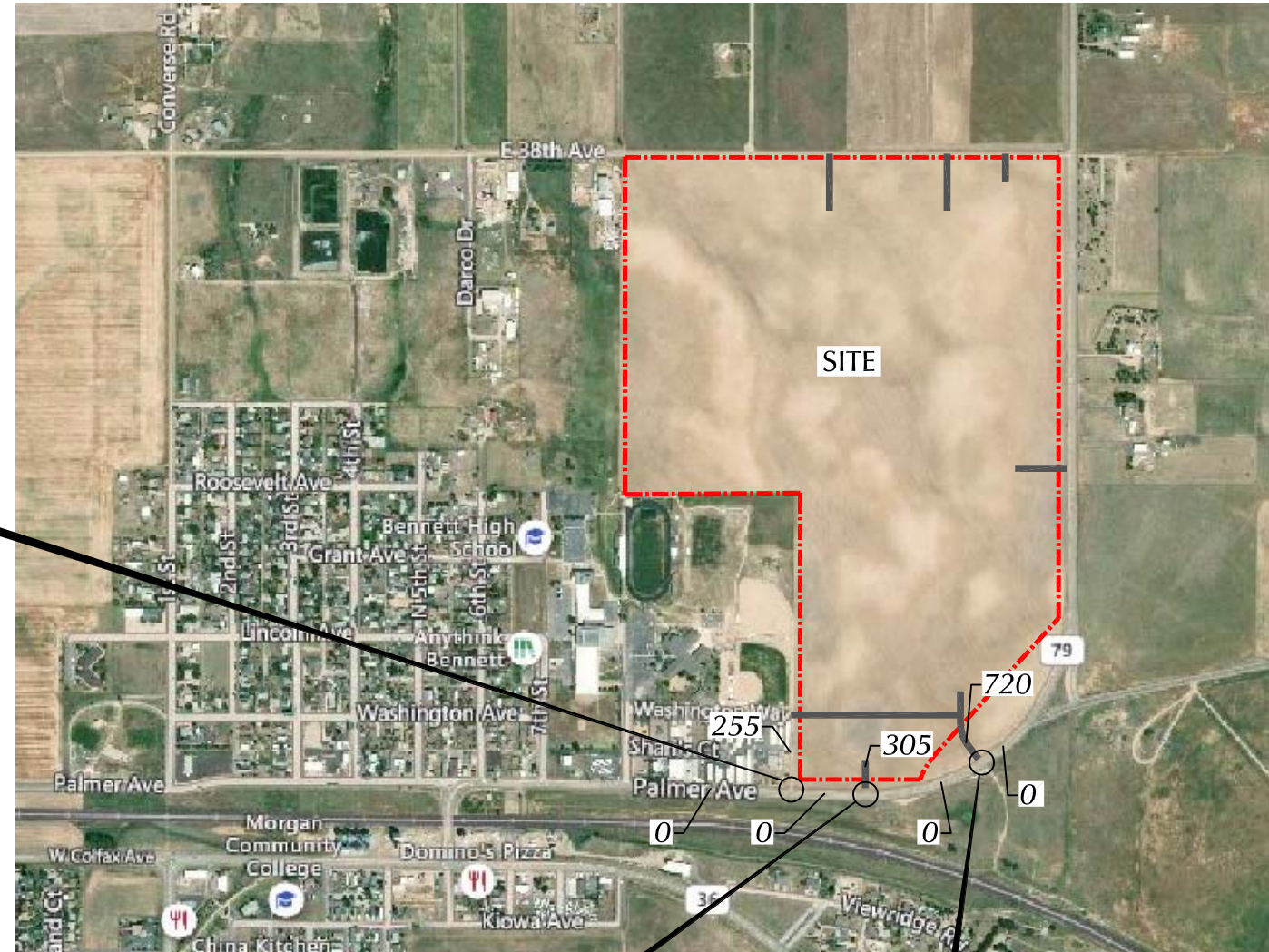
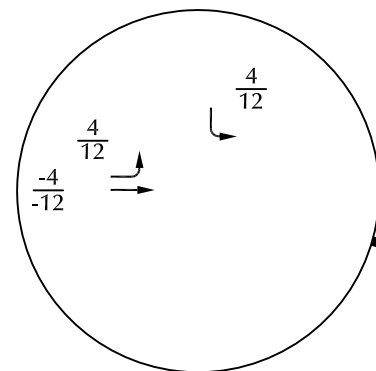
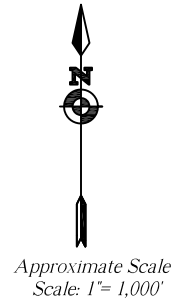


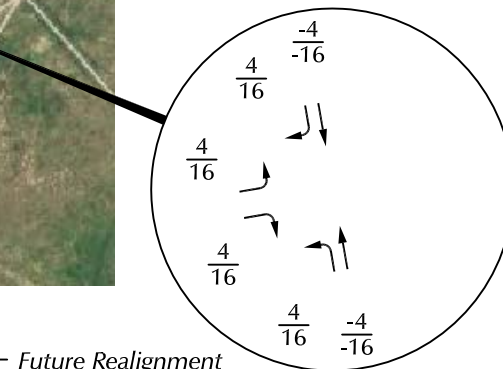
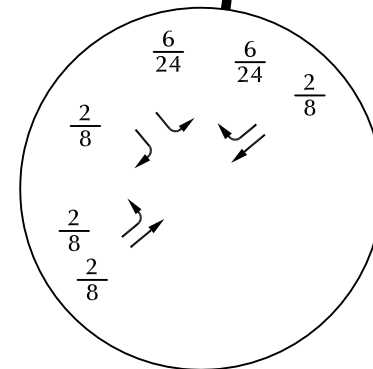
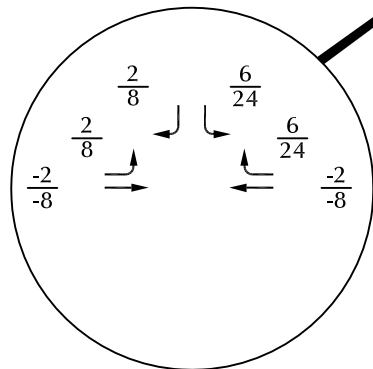
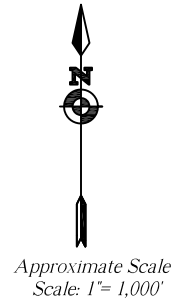
Figure 7b
**Year 2040 Assignment
of Primary Site-Generated Traffic**
Bennett Ranch (LSC #181140)



LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
PM Peak Hour Traffic
1,000 = Average Daily Traffic



Figure 8a
*Year 2023 Assignment
of Passby Site-Generated Traffic*
Bennett Ranch (LSC #181140)



Future Realignment
of SH 79

LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 = PM Peak Hour Traffic
1,000 = Average Daily Traffic



Figure 8b
**Year 2040 Assignment
of Passby Site-Generated Traffic**
Bennett Ranch (LSC #181140)

Recommended Turn Lane Lengths (45mph posted speed limit assumed on SH 79)

- ① EB LT = 530 feet (275 feet for deceleration + 255 feet for vehicle storage) + 160-foot transition taper
- ② WB RT = 275 feet + 160-foot transition taper
- ③ SB LT = 150 feet + 100-foot transition taper
- ④ WB RT = 275 feet + 160-foot transition taper
- ⑤ EB LT = 385 feet (275 feet for deceleration + 110 feet for vehicle storage) + 160-foot transition taper
- ⑥ WB RT = 275 feet + 160-foot transition taper
- ⑦ NB LT = 355 feet (275 feet for deceleration + 80 feet for vehicle storage) + 160-foot transition taper
- ⑧ 345 feet (275 feet for deceleration + 70 feet for vehicle storage) + 160-foot transition taper
- ⑨ Provide 25-foot storage pocket in redirect taper for NB LT lane.

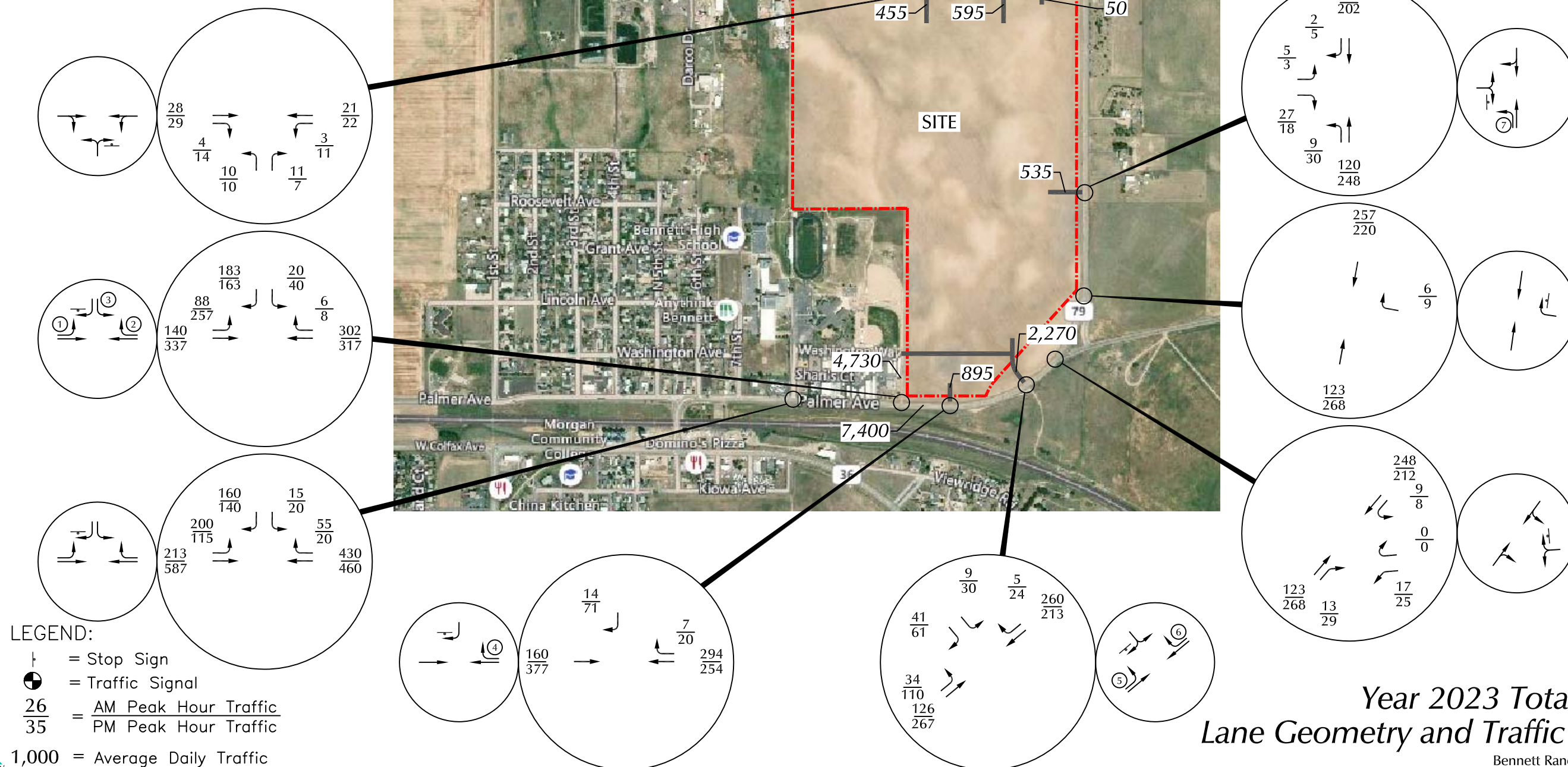


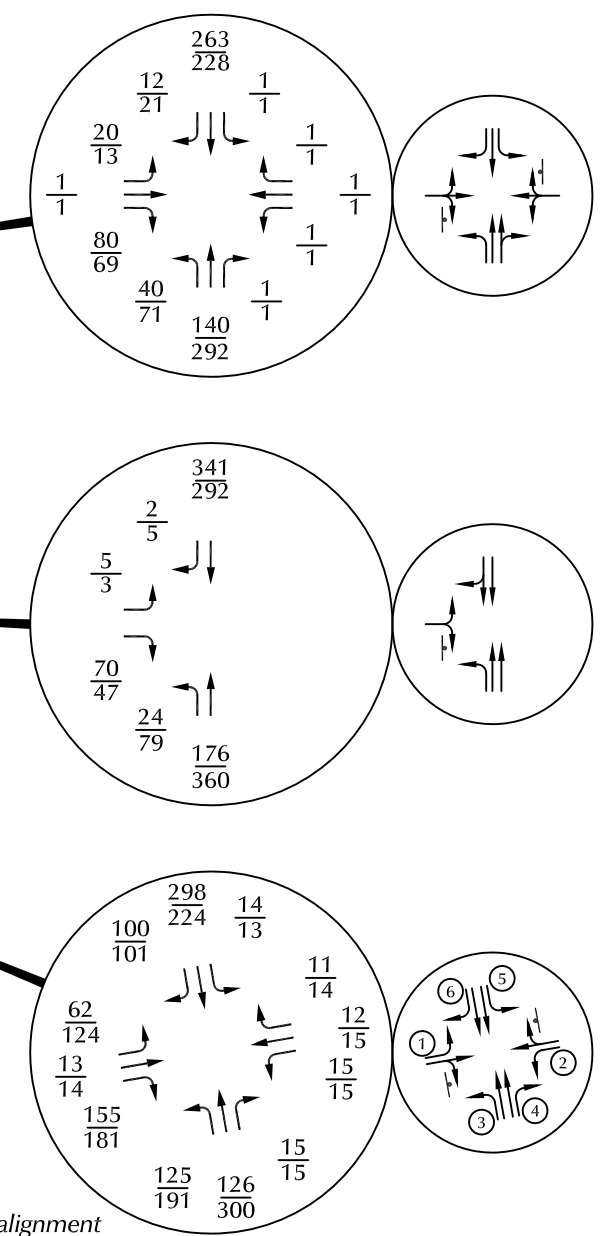
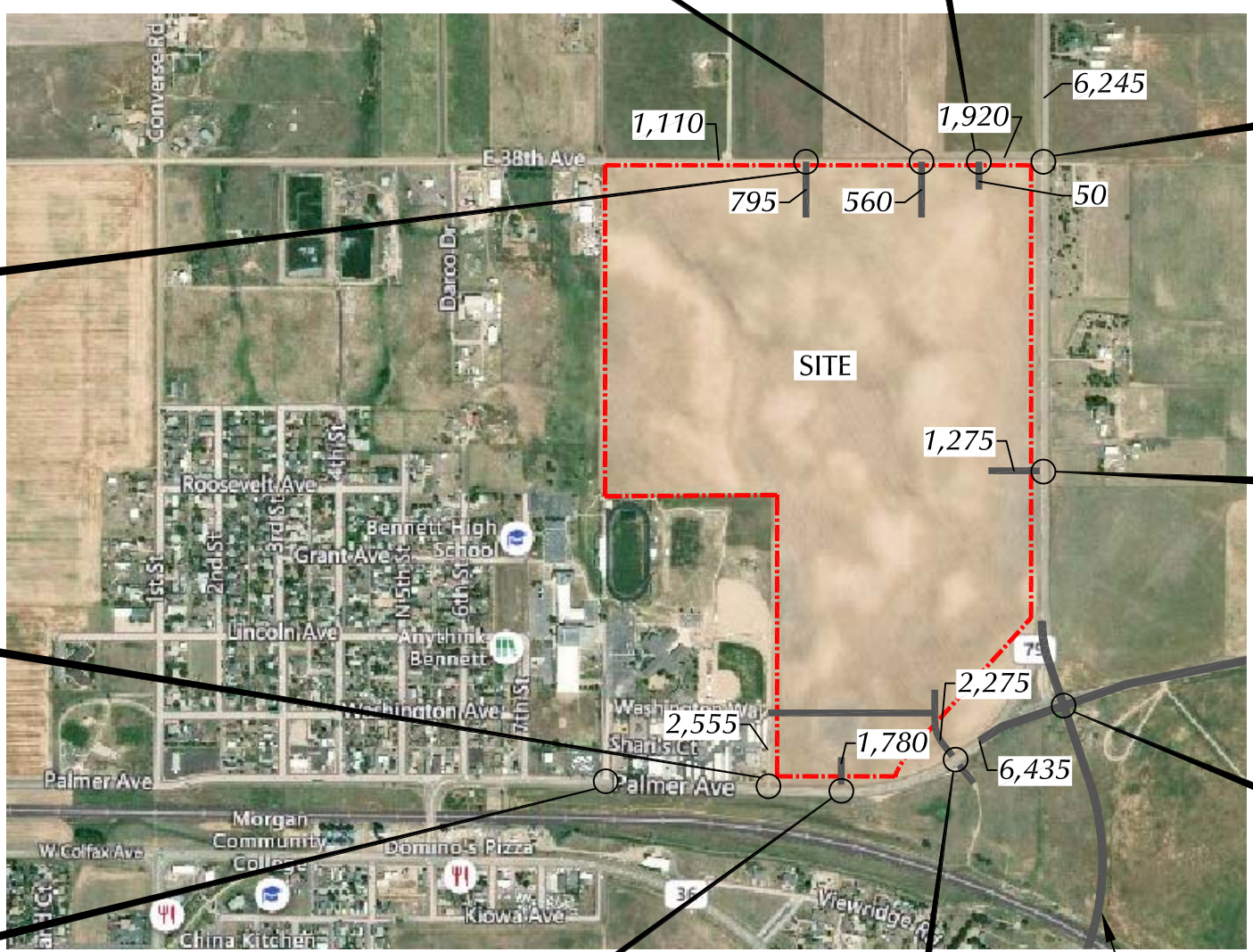
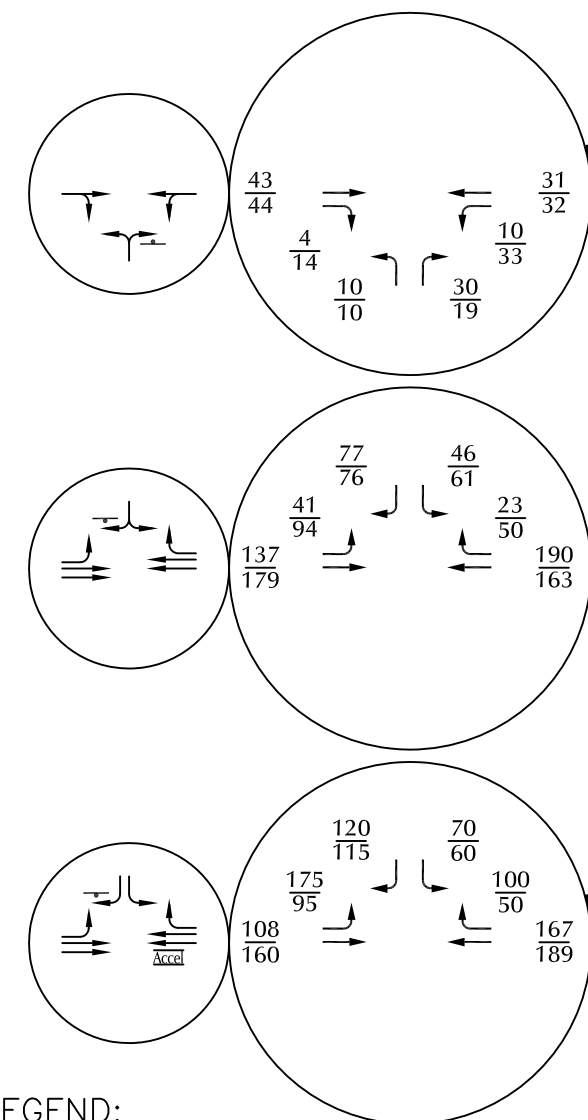
Figure 9

Year 2023 Total Traffic,
Lane Geometry and Traffic Control

Bennett Ranch (LSC #181140)

Recommended Turn Lane Lengths (45mph posted speed limit assumed on SH 79)

- ① = 150 feet + 100-foot transition taper
- ② = 100 feet + 100-foot transition taper
- ③ = 465 feet (275 feet for deceleration + 190 feet for vehicle storage) + 160-foot transition taper
- ④ = 275 feet + 160-foot transition taper
- ⑤ = 300 feet (275 feet for deceleration + 25 feet for vehicle storage) + 160-foot transition taper
- ⑥ = 275 feet + 160-foot transition taper

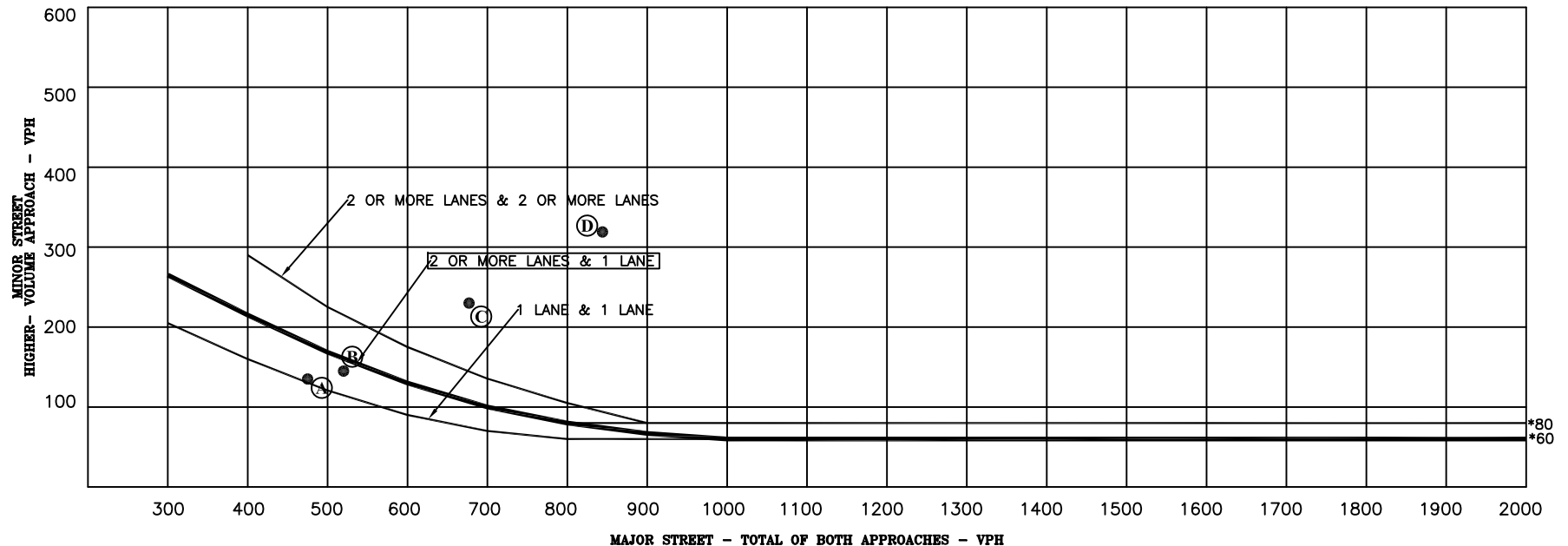


LEGEND:
⬇ = Stop Sign
⦿ = Traffic Signal
26/35 = AM Peak Hour Traffic / PM Peak Hour Traffic
1,000 = Average Daily Traffic

Figure 10
Year 2040 Total Traffic,
Lane Geometry and Traffic Control
Bennett Ranch (LSC #181140)



Figure 4C-2. Warrant 2 Four-Hour Vehicular Volume (70% Factor)
(Community Less than 10,000 population or above 40 mph on Major Street)



* Note: 80 vph applies as the lower threshold volumes for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

Data Points = (Major Street, Minor Street)

- Ⓐ 2040 Background AM Peak = (475,135)
- Ⓑ 2040 Background PM Peak = (520,145)
- Ⓒ 2040 Total AM Peak = (677,230)
- Ⓓ 2040 Total PM Peak = (844,319)

Figure 11

Warrant 2 - Four-Hour Vehicular Volume
SH 79/Old Victory Road/Palmer Avenue

Bennett Ranch (LSC #181140)

COUNTER MEASURES INC.

N/S STREET: KIOWA BENNETT RD
E/W STREET: 38TH AVE
CITY: BENNETT
COUNTY: ADAMS

1889 YORK STREET
DENVER, COLORADO
303-333-7409

File Name : KIOW38TH
Site Code : 00000020
Start Date : 9/20/2018
Page No : 1

Groups Printed- VEHICLES

	KIOWA BENNETT Southbound				38TH AVE Westbound				KIOWA BENNETT Northbound				38TH AVE Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	19	0	0	0	0	0	0	1	24	0	0	1	0	2	0	47
06:45 AM	0	30	0	0	0	0	0	0	0	24	0	0	0	0	0	0	54
Total	0	49	0	0	0	0	0	0	1	48	0	0	1	0	2	0	101
07:00 AM	0	34	0	0	0	0	0	0	3	16	0	0	0	0	1	0	54
07:15 AM	0	32	0	0	0	0	0	0	0	13	0	0	0	0	4	0	49
07:30 AM	0	45	0	0	0	0	0	0	1	23	0	0	0	0	2	0	71
07:45 AM	0	45	1	0	0	0	0	0	1	23	0	0	1	0	1	0	72
Total	0	156	1	0	0	0	0	0	5	75	0	0	1	0	8	0	246
08:00 AM	0	20	0	0	0	0	0	0	0	22	0	0	0	0	1	0	43
08:15 AM	0	31	1	0	0	0	0	0	0	24	0	0	0	0	0	0	56
Total	0	51	1	0	0	0	0	0	0	46	0	0	0	0	1	0	99
04:00 PM	0	22	0	0	0	0	0	0	0	26	0	0	0	0	2	0	50
04:15 PM	0	23	0	0	0	0	0	0	3	27	0	0	1	0	2	0	56
04:30 PM	0	30	0	0	0	0	0	0	0	41	0	0	0	0	0	0	71
04:45 PM	0	34	2	0	0	0	0	0	3	55	0	0	0	0	1	0	95
Total	0	109	2	0	0	0	0	0	6	149	0	0	1	0	5	0	272
05:00 PM	0	41	2	0	0	0	0	0	0	32	0	0	0	0	4	0	79
05:15 PM	0	27	0	0	0	0	0	0	0	38	0	0	0	0	2	0	67
05:30 PM	0	31	0	0	0	0	0	0	3	35	0	0	0	0	2	0	71
05:45 PM	0	29	0	0	0	0	0	0	1	27	0	0	0	0	0	0	57
Total	0	128	2	0	0	0	0	0	4	132	0	0	0	0	8	0	274
Grand Total	0	493	6	0	0	0	0	0	16	450	0	0	3	0	24	0	992
Apprch %	0.0	98.8	1.2	0.0	0.0	0.0	0.0	0.0	3.4	96.6	0.0	0.0	11.1	0.0	88.9	0.0	
Total %	0.0	49.7	0.6	0.0	0.0	0.0	0.0	0.0	1.6	45.4	0.0	0.0	0.3	0.0	2.4	0.0	

COUNTER MEASURES INC.

N/S STREET: KIOWA BENNETT RD
E/W STREET: 38TH AVE
CITY: BENNETT
COUNTY: ADAMS

1889 YORK STREET
DENVER.COLORADO
303-333-7409

File Name : KIOW38TH
Site Code : 00000020
Start Date : 9/20/2018
Page No : 2

	KIOWA BENNETT Southbound					38TH AVE Westbound					KIOWA BENNETT Northbound					38TH AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour	From 06:30 AM to 08:30 AM - Peak 1 of 1																				
Intersection	07:00 AM																				
Volume	0	156	1	0	157	0	0	0	0	0	5	75	0	0	80	1	0	8	0	9	246
Percent	0.0	99.4	0.6	0.0		0.0	0.0	0.0	0.0		6.3	93.8	0.0	0.0		11.1	0.0	88.9	0.0		
07:45 Volume	0	45	1	0	46	0	0	0	0	0	1	23	0	0	24	1	0	1	0	2	72
Peak Factor																					0.854
High Int.	07:45 AM					6:15:00 AM					07:30 AM					07:15 AM					
Volume	0	45	1	0	46	0	0	0	0	0	1	23	0	0	24	0	0	4	0	4	
Peak Factor																					

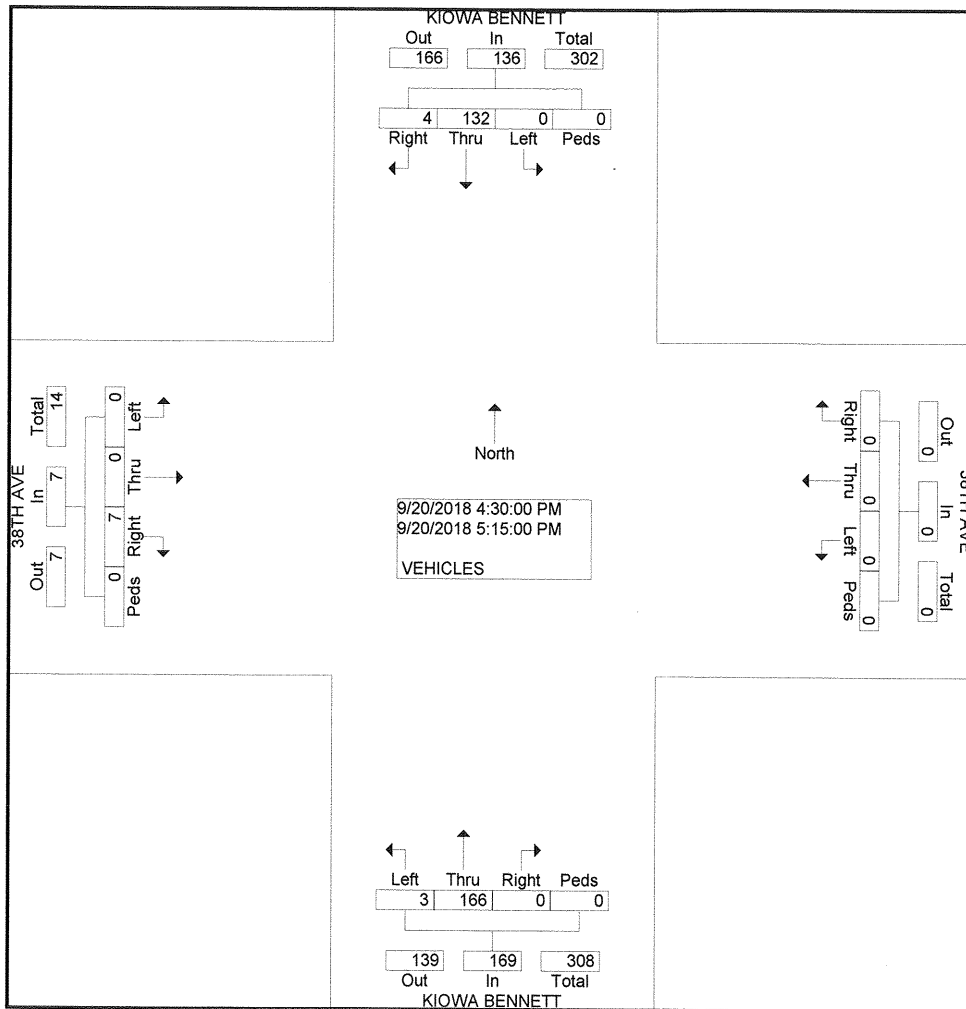
COUNTER MEASURES INC.

N/S STREET: KIOWA BENNETT RD
E/W STREET: 38TH AVE
CITY: BENNETT
COUNTY: ADAMS

1889 YORK STREET
DENVER, COLORADO
303-333-7409

File Name : KIW38TH
Site Code : 00000020
Start Date : 9/20/2018
Page No : 2

	KIOWA BENNETT Southbound					38TH AVE Westbound					KIOWA BENNETT Northbound					38TH AVE Eastbound					
Start Time	Left	Thr u	Rig ht	Ped s	App. Total	Left	Thr u	Rig ht	Ped s	App. Total	Left	Thr u	Rig ht	Ped s	App. Total	Left	Thr u	Rig ht	Ped s	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	0	132	4	0	136	0	0	0	0	0	3	166	0	0	169	0	0	7	0	7	312
Percent	0.0	97.1	2.9	0.0		0.0	0.0	0.0	0.0		1.8	98.2	0.0	0.0		0.0	0.0	100.0	0.0		
04:45 Volume	0	34	2	0	36	0	0	0	0	0	3	55	0	0	58	0	0	1	0	1	95
Peak Factor																					0.821
High Int. Volume	05:00 PM										04:45 PM					05:00 PM					
Peak Factor	0	41	2	0	43 0.79 1	0	0	0	0	0	3	55	0	0	58 0.72 8	0	0	4	0	4 0.43 8	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: GREG'S PL
E/W STREET: PALMER AVE
CITY: BENNETT
COUNTY: ADAMS

File Name : GREPALM
Site Code : 00000022
Start Date : 9/20/2018
Page No : 1

Groups Printed- VEHICLES

	GREG'S PL Southbound				PALMER AVE Westbound				GREG'S PL Northbound				PALMER AVE Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	1	0	0	0	22	0	0	0	0	0	0	1	15	0	0	39
06:45 AM	0	0	0	0	0	35	0	0	0	0	0	0	0	24	0	0	59
Total	0	1	0	0	0	57	0	0	0	0	0	0	1	39	0	0	98
07:00 AM	0	0	0	0	0	33	1	0	0	0	0	0	0	9	0	0	43
07:15 AM	1	0	0	0	0	42	1	0	0	0	0	0	0	11	0	0	55
07:30 AM	5	0	0	0	0	63	2	0	0	0	0	0	3	17	0	0	90
07:45 AM	2	0	4	0	0	52	0	0	0	0	0	0	1	26	0	0	85
Total	8	0	4	0	0	190	4	0	0	0	0	0	4	63	0	0	273
08:00 AM	4	0	0	0	0	33	1	0	0	0	0	0	4	24	0	0	66
08:15 AM	1	0	0	0	0	34	0	0	0	0	0	0	3	25	0	0	63
Total	5	0	0	0	0	67	1	0	0	0	0	0	7	49	0	0	129
04:00 PM	10	0	7	0	0	35	1	0	0	0	0	0	3	42	0	0	98
04:15 PM	7	0	5	0	0	20	1	0	0	0	0	0	1	36	0	0	70
04:30 PM	2	0	0	0	0	29	2	0	0	0	0	0	1	51	0	0	85
04:45 PM	3	0	0	0	0	33	0	0	0	0	0	0	1	56	0	0	93
Total	22	0	12	0	0	117	4	0	0	0	0	0	6	185	0	0	346
05:00 PM	1	0	1	0	0	39	0	0	0	0	0	0	1	36	0	0	78
05:15 PM	1	0	0	0	0	29	0	0	0	0	0	0	2	43	0	0	75
05:30 PM	0	0	0	0	0	33	0	0	0	0	0	0	0	39	0	0	72
05:45 PM	1	0	1	0	0	34	0	0	0	0	0	0	1	29	0	0	66
Total	3	0	2	0	0	135	0	0	0	0	0	0	4	147	0	0	291
Grand Total	38	1	18	0	0	566	9	0	0	0	0	0	22	483	0	0	1137
Apprch %	66.7	1.8	31.6	0.0	0.0	98.4	1.6	0.0	0.0	0.0	0.0	0.0	4.4	95.6	0.0	0.0	
Total %	3.3	0.1	1.6	0.0	0.0	49.8	0.8	0.0	0.0	0.0	0.0	0.0	1.9	42.5	0.0	0.0	

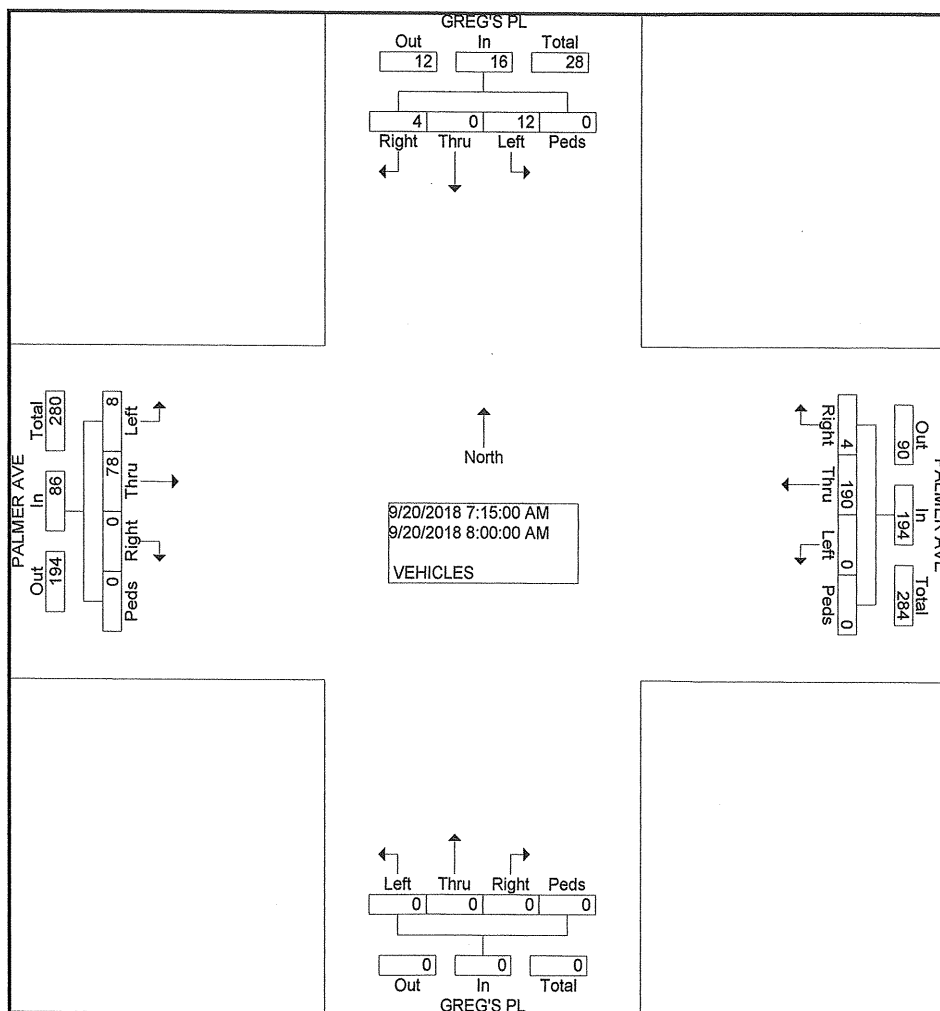
COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: GREG'S PL
E/W STREET: PALMER AVE
CITY: BENNETT
COUNTY: ADAMS

File Name : GREGPALM
Site Code : 00000022
Start Date : 9/20/2018
Page No : 2

	GREG'S PL Southbound					PALMER AVE Westbound					GREG'S PL Northbound					PALMER AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersection 07:15 AM																					
Volume	12	0	4	0	16	0	190	4	0	194	0	0	0	0	0	8	78	0	0	86	296
Percent	75.0	0.0	25.0	0.0		0.0	97.9	2.1	0.0		0.0	0.0	0.0	0.0		9.3	90.7	0.0	0.0		
07:30 Volume	5	0	0	0	5	0	63	2	0	65	0	0	0	0	0	3	17	0	0	20	90
Peak Factor																					0.822
High Int.	07:45 AM					07:30 AM										08:00 AM					
Volume	2	0	4	0	6	0	63	2	0	65	0	0	0	0	0	4	24	0	0	28	
Peak Factor	0.667					0.746										0.768					



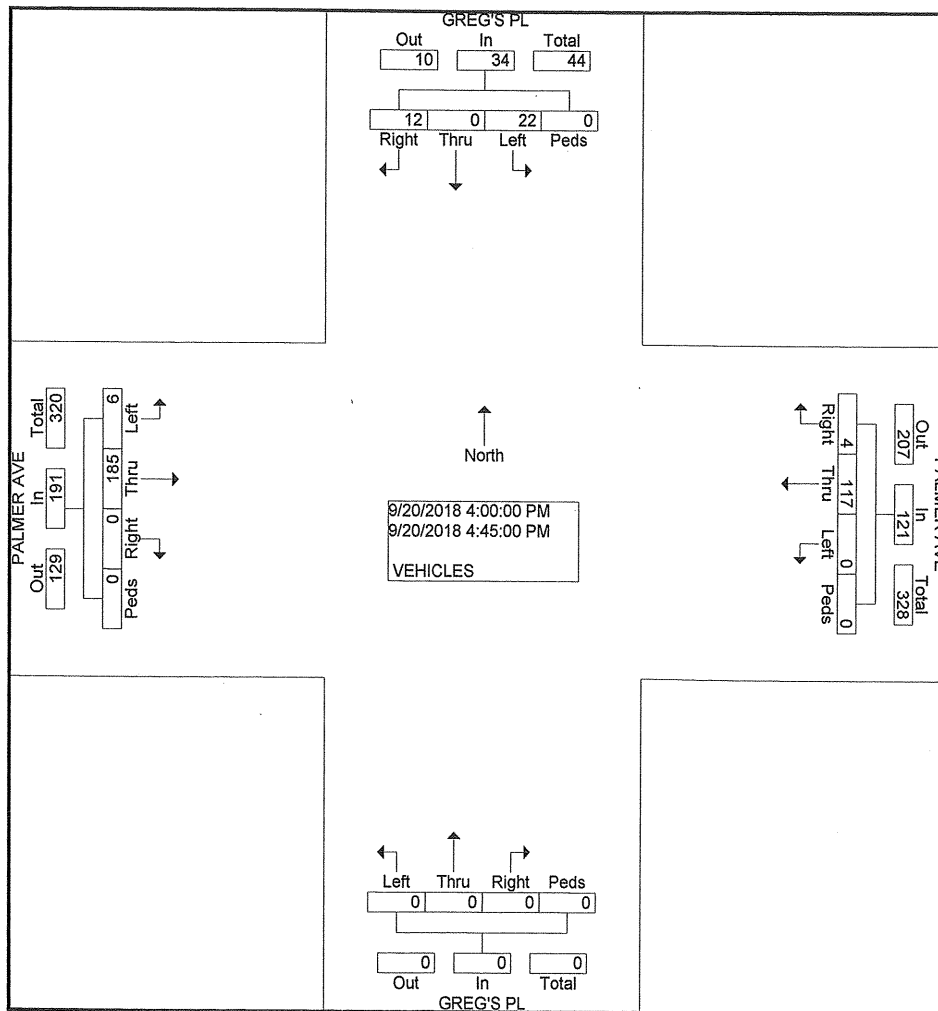
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: GREG'S PL
E/W STREET: PALMER AVE
CITY: BENNETT
COUNTY: ADAMS

File Name : GREGPALM
Site Code : 00000022
Start Date : 9/20/2018
Page No : 2

	GREG'S PL Southbound					PALMER AVE Westbound					GREG'S PL Northbound					PALMER AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 04:45 PM - Peak 1 of 1																					
Intersecti on	04:00 PM																				
Volume	22	0	12	0	34	0	117	4	0	121	0	0	0	0	0	6	185	0	0	191	346
Percent	64.7	0.0	35.3	0.0		0.0	96.7	3.3	0.0		0.0	0.0	0.0	0.0		3.1	96.9	0.0	0.0		
04:00 Volume	10	0	7	0	17	0	35	1	0	36	0	0	0	0	0	3	42	0	0	45	98
Peak Factor																					0.883
High Int.	04:00 PM					04:00 PM										04:45 PM					
Volume	10	0	7	0	17	0	35	1	0	36	0	0	0	0	0	1	56	0	0	57	
Peak Factor					0.50					0.84										0.838	
					0					0										8	



COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: 8TH ST
E/W STREET: PALMER AVE
CITY: BENNETT
COUNTY: ADAMS

File Name : 8THPALM
Site Code : 00000015
Start Date : 9/20/2018
Page No : 1

Groups Printed- VEHICLES

	8TH ST Southbound				PALMER AVE Westbound				8TH ST Northbound				PALMER AVE Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	0	3	0	0	22	0	0	0	0	0	0	2	16	0	0	43
06:45 AM	0	0	0	0	0	34	1	0	0	0	0	0	6	24	0	0	65
Total	0	0	3	0	0	56	1	0	0	0	0	0	8	40	0	0	108
07:00 AM	0	0	1	0	0	33	0	0	0	0	0	0	14	9	0	0	57
07:15 AM	1	0	8	0	0	33	9	0	0	0	0	0	29	11	0	0	91
07:30 AM	3	0	40	4	0	40	23	0	0	0	0	0	69	17	0	0	196
07:45 AM	4	0	73	2	0	39	13	0	0	0	0	0	83	23	0	0	237
Total	8	0	122	6	0	145	45	0	0	0	0	0	195	60	0	0	581
08:00 AM	6	0	33	0	0	28	5	0	0	0	0	0	15	22	0	0	109
08:15 AM	3	0	10	0	0	34	0	0	0	0	0	0	10	25	0	0	82
Total	9	0	43	0	0	62	5	0	0	0	0	0	25	47	0	0	191
04:00 PM	6	0	58	6	0	34	8	0	0	0	0	2	41	39	0	0	194
04:15 PM	3	0	38	0	0	24	1	0	0	0	0	0	27	34	0	0	127
04:30 PM	8	0	20	0	0	24	5	0	0	0	0	0	21	44	0	0	122
04:45 PM	3	0	20	0	0	31	2	0	0	0	0	0	22	54	0	0	132
Total	20	0	136	6	0	113	16	0	0	0	0	2	111	171	0	0	575
05:00 PM	3	0	15	2	0	35	5	0	0	0	0	0	16	34	0	0	110
05:15 PM	4	0	20	0	0	25	4	0	0	0	0	0	20	41	0	0	114
05:30 PM	2	0	11	0	0	33	0	0	0	0	0	0	10	37	0	0	93
05:45 PM	2	0	9	0	0	33	2	0	0	0	0	0	13	28	0	0	87
Total	11	0	55	2	0	126	11	0	0	0	0	0	59	140	0	0	404
Grand Total	48	0	359	14	0	502	78	0	0	0	0	2	398	458	0	0	1859
Apprch %	11.4	0.0	85.3	3.3	0.0	86.6	13.4	0.0	0.0	0.0	0.0	100.0	46.5	53.5	0.0	0.0	
Total %	2.6	0.0	19.3	0.8	0.0	27.0	4.2	0.0	0.0	0.0	0.0	0.1	21.4	24.6	0.0	0.0	

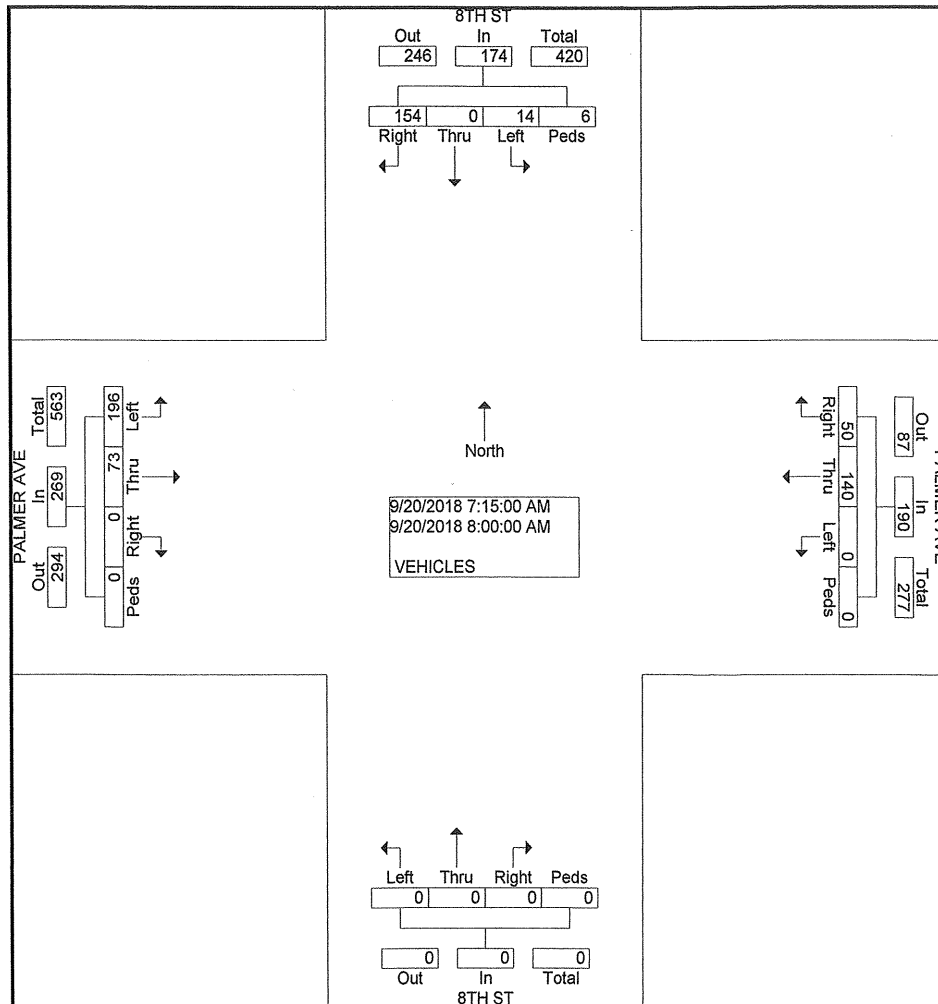
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: 8THST
E/W STREET: PALMER AVE
CITY: BENNETT
COUNTY: ADAMS

File Name : 8THPALM
Site Code : 00000015
Start Date : 9/20/2018
Page No : 2

	8TH ST Southbound					PALMER AVE Westbound					8TH ST Northbound					PALMER AVE Eastbound					
Start Time	Left	Thru	Rig ht	Ped s	App. Total	Left	Thru	Rig ht	Ped s	App. Total	Left	Thru	Rig ht	Ped s	App. Total	Left	Thru	Rig ht	Ped s	App. Total	Int. Total
Peak Hour From 07:15 AM to 08:00 AM - Peak 1 of 1																					
Intersecti on	07:15 AM																				
Volume	14	0	154	6	174	0	140	50	0	190	0	0	0	0	0	196	73	0	0	269	633
Percent	8.0	0.0	88. 5	3.4		0.0	73. 7	26. 3	0.0		0.0	0.0	0.0	0.0		72. 9	27. 1	0.0	0.0		
07:45 Volume	4	0	73	2	79	0	39	13	0	52	0	0	0	0	0	83	23	0	0	106	237
Peak Factor																					0.668
High Int.	07:45 AM					07:30 AM										07:45 AM					
Volume	4	0	73	2	79	0	40	23	0	63	0	0	0	0	0	83	23	0	0	106	
Peak Factor	0.55					0.75										0.63					
	1					4										4					



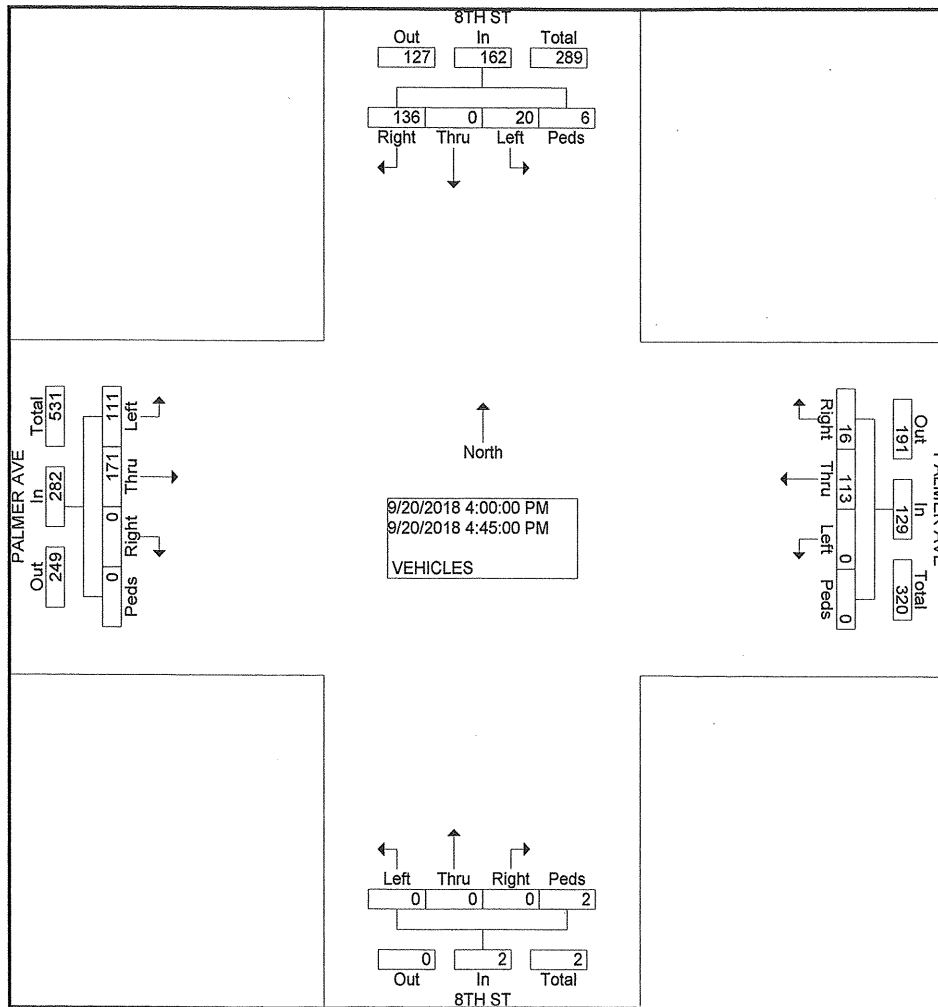
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: 8THST
E/W STREET: PALMER AVE
CITY: BENNETT
COUNTY: ADAMS

File Name : 8THPALM
Site Code : 00000015
Start Date : 9/20/2018
Page No : 2

	8TH ST Southbound					PALMER AVE Westbound					8TH ST Northbound					PALMER AVE Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 04:45 PM - Peak 1 of 1																					
Intersecti on	04:00 PM																				
Volume	20	0	136	6	162	0	113	16	0	129	0	0	0	2	2	111	171	0	0	282	575
Percent	12.3	0.0	84.0	3.7		0.0	87.6	12.4	0.0		0.0	0.0	0.0	100.0		39.4	60.6	0.0	0.0		
04:00 Volume	6	0	58	6	70	0	34	8	0	42	0	0	0	2	2	41	39	0	0	80	194
Peak Factor																					0.741
High Int.	04:00 PM					04:00 PM					04:00 PM					04:00 PM					
Volume	6	0	58	6	70	0	34	8	0	42	0	0	0	2	2	41	39	0	0	80	
Peak Factor					0.57					0.76					0.25					0.88	1



COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO 80206
303-333-7409

Location: KIOWA-BENNETT RD N/O 38TH AVE
City: BENNETT
County: ADAMS
Direction: NORTHBOUND-SOUTHBOUND

Site Code: 112619
Station ID: 112619

Start Time	26-Nov-18		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	18	9	*	*	*	*	*	*	18	9	*	*	*	*
01:00	*	*	4	8	*	*	*	*	*	*	4	8	*	*	*	*
02:00	*	*	6	6	*	*	*	*	*	*	6	6	*	*	*	*
03:00	*	*	10	7	*	*	*	*	*	*	10	7	*	*	*	*
04:00	*	*	5	6	*	*	*	*	*	*	5	6	*	*	*	*
05:00	*	*	18	12	*	*	*	*	*	*	18	12	*	*	*	*
06:00	*	*	40	44	*	*	*	*	*	*	40	44	*	*	*	*
07:00	*	*	63	100	*	*	*	*	*	*	63	100	*	*	*	*
08:00	*	*	94	166	*	*	*	*	*	*	94	166	*	*	*	*
09:00	*	*	136	135	*	*	*	*	*	*	136	135	*	*	*	*
10:00	*	*	112	165	*	*	*	*	*	*	112	165	*	*	*	*
11:00	*	*	117	114	*	*	*	*	*	*	117	114	*	*	*	*
12:00 PM	*	*	118	114	*	*	*	*	*	*	118	114	*	*	*	*
01:00	*	*	107	130	*	*	*	*	*	*	107	130	*	*	*	*
02:00	*	*	128	124	*	*	*	*	*	*	128	124	*	*	*	*
03:00	*	*	111	86	*	*	*	*	*	*	111	86	*	*	*	*
04:00	*	*	124	118	*	*	*	*	*	*	124	118	*	*	*	*
05:00	*	*	194	140	*	*	*	*	*	*	194	140	*	*	*	*
06:00	*	*	150	126	*	*	*	*	*	*	150	126	*	*	*	*
07:00	*	*	106	66	*	*	*	*	*	*	106	66	*	*	*	*
08:00	*	*	74	50	*	*	*	*	*	*	74	50	*	*	*	*
09:00	*	*	50	26	*	*	*	*	*	*	50	26	*	*	*	*
10:00	*	*	36	26	*	*	*	*	*	*	36	26	*	*	*	*
11:00	*	*	34	3	*	*	*	*	*	*	34	3	*	*	*	*
Total Day	0	0	1855	1781	0	0	0	0	0	0	1855	1781	0	0	0	0
AM Peak Vol.	-	-	09:00	08:00	-	-	-	-	-	-	09:00	08:00	-	-	-	-
PM Peak Vol.	-	-	17:00	17:00	-	-	-	-	-	-	17:00	17:00	-	-	-	-
	-	-	194	140	-	-	-	-	-	-	194	140	-	-	-	-
Comb. Total	0		3636		0		0		0		3636		0		0	
ADT	ADT 3,636			AADT 3,636												

COUNTER MEASURES INC.
 1889 YORK STREET
 DENVER, COLORADO 80206
 303-333-7409

Location: PALMER AVE E/O GREYS PL
 City: BENNETT
 County: ADAMS
 Direction: WESTBOUND-EASTBOUND

Site Code: 112617
 Station ID: 112617

Start Time	26-Nov-18		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	*	*	*	*	*	*	9	18	*	*	*	*
01:00	*	*	8	6	*	*	*	*	*	*	8	6	*	*	*	*
02:00	*	*	6	6	*	*	*	*	*	*	6	6	*	*	*	*
03:00	*	*	4	10	*	*	*	*	*	*	4	10	*	*	*	*
04:00	*	*	8	3	*	*	*	*	*	*	8	3	*	*	*	*
05:00	*	*	12	14	*	*	*	*	*	*	12	14	*	*	*	*
06:00	*	*	58	36	*	*	*	*	*	*	58	36	*	*	*	*
07:00	*	*	98	50	*	*	*	*	*	*	98	50	*	*	*	*
08:00	*	*	190	98	*	*	*	*	*	*	190	98	*	*	*	*
09:00	*	*	142	144	*	*	*	*	*	*	142	144	*	*	*	*
10:00	*	*	154	99	*	*	*	*	*	*	154	99	*	*	*	*
11:00	*	*	137	126	*	*	*	*	*	*	137	126	*	*	*	*
12:00 PM	*	*	102	106	*	*	*	*	*	*	102	106	*	*	*	*
01:00	*	*	142	129	*	*	*	*	*	*	142	129	*	*	*	*
02:00	*	*	125	138	*	*	*	*	*	*	125	138	*	*	*	*
03:00	*	*	106	117	*	*	*	*	*	*	106	117	*	*	*	*
04:00	*	*	112	137	*	*	*	*	*	*	112	137	*	*	*	*
05:00	*	*	149	232	*	*	*	*	*	*	149	232	*	*	*	*
06:00	*	*	132	199	*	*	*	*	*	*	132	199	*	*	*	*
07:00	*	*	52	127	*	*	*	*	*	*	52	127	*	*	*	*
08:00	*	*	52	89	*	*	*	*	*	*	52	89	*	*	*	*
09:00	*	*	28	62	*	*	*	*	*	*	28	62	*	*	*	*
10:00	*	*	22	42	*	*	*	*	*	*	22	42	*	*	*	*
11:00	*	*	8	32	*	*	*	*	*	*	8	32	*	*	*	*
Total Day	0	0	1856	2020	0	0	0	0	0	0	1856	2020	0	0	0	0
AM Peak	-	-	08:00	09:00	-	-	-	-	-	-	08:00	09:00	-	-	-	-
Vol.	-	-	190	144	-	-	-	-	-	-	190	144	-	-	-	-
PM Peak	-	-	17:00	17:00	-	-	-	-	-	-	17:00	17:00	-	-	-	-
Vol.	-	-	149	232	-	-	-	-	-	-	149	232	-	-	-	-
Comb. Total	0	0	3876	3876	0	0	0	0	0	0	3876	3876	0	0	0	0
ADT	ADT 3.876		AADT 3.876													

COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO 80206
303-333-7409

Site Code: 112610
Station ID: 112610

Location: PALMER AVE W/O 8TH ST
City: BENNETT
County: ADAMS
Direction: WESTBOUND-EASTBOUND

Start Time	26-Nov-18		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	12	18	*	*	*	*	*	*	12	18	*	*	*	*
01:00	*	*	8	7	*	*	*	*	*	*	8	7	*	*	*	*
02:00	*	*	6	6	*	*	*	*	*	*	6	6	*	*	*	*
03:00	*	*	5	10	*	*	*	*	*	*	5	10	*	*	*	*
04:00	*	*	8	4	*	*	*	*	*	*	8	4	*	*	*	*
05:00	*	*	13	14	*	*	*	*	*	*	13	14	*	*	*	*
06:00	*	*	54	42	*	*	*	*	*	*	54	42	*	*	*	*
07:00	*	*	110	62	*	*	*	*	*	*	110	62	*	*	*	*
08:00	*	*	214	220	*	*	*	*	*	*	214	220	*	*	*	*
09:00	*	*	258	230	*	*	*	*	*	*	258	230	*	*	*	*
10:00	*	*	164	120	*	*	*	*	*	*	164	120	*	*	*	*
11:00	*	*	152	149	*	*	*	*	*	*	152	149	*	*	*	*
12:00 PM	*	*	161	161	*	*	*	*	*	*	161	161	*	*	*	*
01:00	*	*	165	146	*	*	*	*	*	*	165	146	*	*	*	*
02:00	*	*	156	176	*	*	*	*	*	*	156	176	*	*	*	*
03:00	*	*	118	138	*	*	*	*	*	*	118	138	*	*	*	*
04:00	*	*	130	207	*	*	*	*	*	*	130	207	*	*	*	*
05:00	*	*	298	366	*	*	*	*	*	*	298	366	*	*	*	*
06:00	*	*	190	219	*	*	*	*	*	*	190	219	*	*	*	*
07:00	*	*	70	142	*	*	*	*	*	*	70	142	*	*	*	*
08:00	*	*	80	106	*	*	*	*	*	*	80	106	*	*	*	*
09:00	*	*	60	73	*	*	*	*	*	*	60	73	*	*	*	*
10:00	*	*	30	42	*	*	*	*	*	*	30	42	*	*	*	*
11:00	*	*	8	33	*	*	*	*	*	*	8	33	*	*	*	*
Total	0	0	2470	2691	0	0	0	0	0	0	2470	2691	0	0	0	0
Day	0		5161		0		0		0		5161		0		0	
AM Peak	-	-	09:00	09:00	-	-	-	-	-	-	09:00	09:00	-	-	-	-
Vol.	-	-	258	230	-	-	-	-	-	-	258	230	-	-	-	-
PM Peak	-	-	17:00	17:00	-	-	-	-	-	-	17:00	17:00	-	-	-	-
Vol.	-	-	298	366	-	-	-	-	-	-	298	366	-	-	-	-

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2010





UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

LOS	Average Vehicle Control Delay	Operational Characteristics
A	<10 seconds	Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.
B	10 to 15 seconds	Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. <u>The delay could be up to 15 seconds.</u> Left-turning vehicles on the uncontrolled street may have to wait to make their turn.
C	15 to 25 seconds	Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection. Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. <u>Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.</u>
D	25 to 35 seconds	<u>This is the point at which a traffic signal may be warranted for this intersection.</u> The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.
E	35 to 50 seconds	The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. <u>There is a high probability that this intersection will meet traffic signal warrants.</u> The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach.
F	>50 seconds	The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. <u>The only remedy for these long delays is installing a traffic signal or restricting the accesses.</u> The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.




HCM 6th TWSC
4: Highway 79 & 38th Avenue

Existing
AM Peak

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	8	0	0	0	5	80	0	0	156	1
Future Vol, veh/h	1	0	8	0	0	0	5	80	0	0	156	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	9	0	0	0	6	94	0	0	184	1
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	291	291	185	295	291	94	185	0	0	94	0	0
Stage 1	185	185	-	106	106	-	-	-	-	-	-	-
Stage 2	106	106	-	189	185	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	661	619	857	657	619	963	1390	-	-	1500	-	-
Stage 1	817	747	-	900	807	-	-	-	-	-	-	-
Stage 2	900	807	-	813	747	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	658	616	857	647	616	963	1390	-	-	1500	-	-
Mov Cap-2 Maneuver	658	616	-	647	616	-	-	-	-	-	-	-
Stage 1	813	747	-	896	803	-	-	-	-	-	-	-
Stage 2	896	803	-	804	747	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.4		0			0.4			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1390	-	-	829	-	1500	-	-				
HCM Lane V/C Ratio	0.004	-	-	0.013	-	-	-	-				
HCM Control Delay (s)	7.6	0	-	9.4	0	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-				

HCM 6th TWSC 9: Palmer Avenue & Old Victory Road

Existing
AM Peak




Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	0	85	5	3	185
Future Vol, veh/h	10	0	85	5	3	185
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	101	6	4	220
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	332	104	0	0	107	0
Stage 1	104	-	-	-	-	-
Stage 2	228	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	663	951	-	-	1484	-
Stage 1	920	-	-	-	-	-
Stage 2	810	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	661	951	-	-	1484	-
Mov Cap-2 Maneuver	661	-	-	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	810	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.5	0		0.1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-		661	1484	-
HCM Lane V/C Ratio	-	-		0.018	0.002	-
HCM Control Delay (s)	-	-		10.5	7.4	0
HCM Lane LOS	-	-		B	A	A
HCM 95th %tile Q(veh)	-	-		0.1	0	-

HCM 6th TWSC
18: Palmer Avenue & Greg's Place

Existing
AM Peak

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	78	190	4	12	4
Future Vol, veh/h	8	78	190	4	12	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	95	232	5	15	5

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	237	0	0 350 235
Stage 1	-	-	- 235 -
Stage 2	-	-	- 115 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1330	-	- 647 804
Stage 1	-	-	- 804 -
Stage 2	-	-	- 910 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1330	-	- 642 804
Mov Cap-2 Maneuver	-	-	- 642 -
Stage 1	-	-	- 798 -
Stage 2	-	-	- 910 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.5
HCM LOS			B





Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1330	-	-	-	676
HCM Lane V/C Ratio	0.007	-	-	-	0.029
HCM Control Delay (s)	7.7	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 6th TWSC
21: Palmer Avenue & 8th Street

Existing
AM Peak

Intersection

Int Delay, s/veh 6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	196	73	140	50	14	154
Future Vol, veh/h	196	73	140	50	14	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	293	109	209	75	21	230

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	284	0	0 942 247
Stage 1	-	-	- - 247 -
Stage 2	-	-	- - 695 -
Critical Hdwy	4.12	-	- - 6.42 6.22
Critical Hdwy Stg 1	-	-	- - 5.42 -
Critical Hdwy Stg 2	-	-	- - 5.42 -
Follow-up Hdwy	2.218	-	- - 3.518 3.318
Pot Cap-1 Maneuver	1278	-	- - 292 792
Stage 1	-	-	- - 794 -
Stage 2	-	-	- - 495 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1278	-	- - 221 792
Mov Cap-2 Maneuver	-	-	- - 221 -
Stage 1	-	-	- - 600 -
Stage 2	-	-	- - 495 -

Approach	EB	WB	SB
HCM Control Delay, s	6.3	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1278	-	-	-	221	792
HCM Lane V/C Ratio	0.229	-	-	-	0.095	0.29
HCM Control Delay (s)	8.7	0	-	-	23	11.4
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0.9	-	-	-	0.3	1.2

HCM 6th TWSC
4: Highway 79 & 38th Avenue

Existing
PM Peak

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	7	0	0	0	3	175	0	0	132	4
Future Vol, veh/h	0	0	7	0	0	0	3	175	0	0	132	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	9	0	0	0	4	213	0	0	161	5




Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	385	385	164	389	387	213	166	0	0	213	0	0
Stage 1	164	164	-	221	221	-	-	-	-	-	-	-
Stage 2	221	221	-	168	166	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	573	549	881	570	547	827	1412	-	-	1357	-	-
Stage 1	838	762	-	781	720	-	-	-	-	-	-	-
Stage 2	781	720	-	834	761	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	572	547	881	563	545	827	1412	-	-	1357	-	-
Mov Cap-2 Maneuver	572	547	-	563	545	-	-	-	-	-	-	-
Stage 1	835	762	-	779	718	-	-	-	-	-	-	-
Stage 2	779	718	-	826	761	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.1		0		0.1		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1412	-	-	881	-	1357	-
HCM Lane V/C Ratio	0.003	-	-	0.01	-	-	-
HCM Control Delay (s)	7.6	0	-	9.1	0	0	-
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-

HCM 6th TWSC
7: Palmer Avenue & Old Victory Road

Existing
PM Peak




Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	0	185	20	3	105
Future Vol, veh/h	15	0	185	20	3	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	0	210	23	3	119
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	347	222	0	0	233	0
Stage 1	222	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	650	818	-	-	1335	-
Stage 1	815	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	649	818	-	-	1335	-
Mov Cap-2 Maneuver	649	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.7	0		0.2		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-		649	1335	-
HCM Lane V/C Ratio	-	-		0.026	0.003	-
HCM Control Delay (s)	-	-		10.7	7.7	0
HCM Lane LOS	-	-		B	A	A
HCM 95th %tile Q(veh)	-	-		0.1	0	-

HCM 6th TWSC
10: Palmer Avenue & Greg's Place

Existing
PM Peak

Intersection





Int Delay, s/veh 1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	185	117	4	22	12
Future Vol, veh/h	6	185	117	4	22	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	210	133	5	25	14

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	138	0	0 360 136
Stage 1	-	-	- 136 -
Stage 2	-	-	- 224 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1446	-	- 639 913
Stage 1	-	-	- 890 -
Stage 2	-	-	- 813 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1446	-	- 636 913
Mov Cap-2 Maneuver	-	-	- 636 -
Stage 1	-	-	- 886 -
Stage 2	-	-	- 813 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1446	-	-	-	712
HCM Lane V/C Ratio	0.005	-	-	-	0.054
HCM Control Delay (s)	7.5	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection						
Int Delay, s/veh	4.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	111	171	113	16	20	136
Future Vol, veh/h	111	171	113	16	20	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	150	231	153	22	27	184
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	175	0	-	0	695	164
Stage 1	-	-	-	-	164	-
Stage 2	-	-	-	-	531	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1401	-	-	-	408	881
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	590	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1401	-	-	-	358	881
Mov Cap-2 Maneuver	-	-	-	-	358	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	590	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.1	0		10.9		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1401	-	-	-	358	881
HCM Lane V/C Ratio	0.107	-	-	-	0.075	0.209
HCM Control Delay (s)	7.9	0	-	-	15.9	10.2
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.2	0.8




Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	15	1	1	1	10	90	1	1	175	5
Future Vol, veh/h	10	1	15	1	1	1	10	90	1	1	175	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	1	17	1	1	1	11	102	1	1	199	6
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	330	329	202	338	332	103	205	0	0	103	0	0
Stage 1	204	204	-	125	125	-	-	-	-	-	-	-
Stage 2	126	125	-	213	207	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	623	590	839	616	588	952	1366	-	-	1489	-	-
Stage 1	798	733	-	879	792	-	-	-	-	-	-	-
Stage 2	878	792	-	789	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	617	584	839	598	582	952	1366	-	-	1489	-	-
Mov Cap-2 Maneuver	617	584	-	598	582	-	-	-	-	-	-	-
Stage 1	791	732	-	871	785	-	-	-	-	-	-	-
Stage 2	868	785	-	771	730	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	10.2		10.4			0.8			0			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1366	-	-	726	676	1489	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.041	0.005	0.001	-	-				
HCM Control Delay (s)	7.7	0	-	10.2	10.4	7.4	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-				

HCM 6th TWSC
9: Palmer Avenue & Old Victory Road

2023 Background
AM Peak

Intersection

Int Delay, s/veh 0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	0	95	10	5	185
Future Vol, veh/h	15	0	95	10	5	185
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	0	108	11	6	210




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	336	114	0
Stage 1	114	-	-
Stage 2	222	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	659	939	-
Stage 1	911	-	-
Stage 2	815	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	656	939	-
Mov Cap-2 Maneuver	656	-	-
Stage 1	906	-	-
Stage 2	815	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	656	1469
HCM Lane V/C Ratio	-	-	0.026	0.004
HCM Control Delay (s)	-	-	10.6	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection







Int Delay, s/veh 0.9





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	90	195	5	15	5
Future Vol, veh/h	10	90	195	5	15	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	113	244	6	19	6

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	250	0	0 386 247
Stage 1	-	-	- - 247 -
Stage 2	-	-	- - 139 -
Critical Hdwy	4.12	-	- - 6.42 6.22
Critical Hdwy Stg 1	-	-	- - 5.42 -
Critical Hdwy Stg 2	-	-	- - 5.42 -
Follow-up Hdwy	2.218	-	- - 3.518 3.318
Pot Cap-1 Maneuver	1316	-	- - 617 792
Stage 1	-	-	- - 794 -
Stage 2	-	-	- - 888 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1316	-	- - 610 792
Mov Cap-2 Maneuver	-	-	- - 610 -
Stage 1	-	-	- - 785 -
Stage 2	-	-	- - 888 -




Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1316	-	-	-	647
HCM Lane V/C Ratio	0.009	-	-	-	0.039
HCM Control Delay (s)	7.8	0	-	-	10.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	5.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	200	85	145	55	15	160
Future Vol, veh/h	200	85	145	55	15	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	300	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	286	121	207	79	21	229
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	286	0	-	0	900	207
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	693	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1276	-	-	-	309	833
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	496	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1276	-	-	-	240	833
Mov Cap-2 Maneuver	-	-	-	-	190	-
Stage 1	-	-	-	-	643	-
Stage 2	-	-	-	-	496	-
Approach	EB	WB		SB		
HCM Control Delay, s	6.1	0		12.2		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1276	-	-	-	190	833
HCM Lane V/C Ratio	0.224	-	-	-	0.113	0.274
HCM Control Delay (s)	8.6	-	-	-	26.3	10.9
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0.9	-	-	-	0.4	1.1




Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	15	1	1	1	5	195	1	1	150	10
Future Vol, veh/h	5	1	15	1	1	1	5	195	1	1	150	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	1	17	1	1	1	6	222	1	1	170	11
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	414	413	176	422	418	223	181	0	0	223	0	0
Stage 1	178	178	-	235	235	-	-	-	-	-	-	-
Stage 2	236	235	-	187	183	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	549	529	867	542	526	817	1394	-	-	1346	-	-
Stage 1	824	752	-	768	710	-	-	-	-	-	-	-
Stage 2	767	710	-	815	748	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	545	526	867	528	523	817	1394	-	-	1346	-	-
Mov Cap-2 Maneuver	545	526	-	528	523	-	-	-	-	-	-	-
Stage 1	820	751	-	764	706	-	-	-	-	-	-	-
Stage 2	761	706	-	797	747	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	10		11.1		0.2		0					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1394	-	-	740	596	1346	-	-				
HCM Lane V/C Ratio	0.004	-	-	0.032	0.006	0.001	-	-				
HCM Control Delay (s)	7.6	0	-	10	11.1	7.7	0	-				
HCM Lane LOS	A	A	-	B	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-				

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗			↗
Traffic Vol, veh/h	0	5	195	0	0	165
Future Vol, veh/h	0	5	195	0	0	165
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	6	222	0	0	188
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	222	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	818	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	818	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.4	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBTWBLn1		SBT			
Capacity (veh/h)	- 818		-			
HCM Lane V/C Ratio	- 0.007		-			
HCM Control Delay (s)	- 9.4		-			
HCM Lane LOS	- A		-			
HCM 95th %tile Q(veh)	- 0		-			

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	0	195	25	5	160
Future Vol, veh/h	20	0	195	25	5	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	0	222	28	6	182
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	430	236	0	0	250	0
Stage 1	236	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	582	803	-	-	1316	-
Stage 1	803	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	579	803	-	-	1316	-
Mov Cap-2 Maneuver	579	-	-	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.5	0		0.2		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 579		1316	-	
HCM Lane V/C Ratio	-	- 0.039		0.004	-	
HCM Control Delay (s)	-	- 11.5		7.7	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 0.1		0	-	

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	195	175	5	25	15
Future Vol, veh/h	7	195	175	5	25	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	229	206	6	29	18




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	212	0	0 454 209
Stage 1	-	-	- - 209 -
Stage 2	-	-	- - 245 -
Critical Hdwy	4.12	-	- - 6.42 6.22
Critical Hdwy Stg 1	-	-	- - 5.42 -
Critical Hdwy Stg 2	-	-	- - 5.42 -
Follow-up Hdwy	2.218	-	- - 3.518 3.318
Pot Cap-1 Maneuver	1358	-	- - 564 831
Stage 1	-	-	- - 826 -
Stage 2	-	-	- - 796 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1358	-	- - 560 831
Mov Cap-2 Maneuver	-	-	- - 560 -
Stage 1	-	-	- - 820 -
Stage 2	-	-	- - 796 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1358	-	-	-	638
HCM Lane V/C Ratio	0.006	-	-	-	0.074
HCM Control Delay (s)	7.7	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2




HCM 6th TWSC
1: Northwest Site Access & 38th Avenue

2023 Total
AM Peak

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	28	4	3	21	10	11
Future Vol, veh/h	28	4	3	21	10	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	5	3	24	11	13
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	37	0	65	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	30	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1574	-	941	1038
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1574	-	939	1038
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	993	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.9		8.7	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	988	-	-	1574	-	
HCM Lane V/C Ratio	0.024	-	-	0.002	-	
HCM Control Delay (s)	8.7	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	




HCM 6th TWSC
2: Northeast Site Access & 38th Avenue

2023 Total
AM Peak

Intersection						
Int Delay, s/veh	3.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	38	1	9	22	3	29
Future Vol, veh/h	38	1	9	22	3	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	1	10	25	3	33
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	44	0	89	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	45	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1564	-	912	1026
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	977	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1564	-	907	1026
Mov Cap-2 Maneuver	-	-	-	-	907	-
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	977	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.1		8.7	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1014	-	-	1564	-	
HCM Lane V/C Ratio	0.036	-	-	0.007	-	
HCM Control Delay (s)	8.7	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 6th TWSC
3: Fire Station Access & 38th Avenue

2023 Total
AM Peak

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	66	0	7	31	0	3
Future Vol, veh/h	66	0	7	31	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	75	0	8	35	0	3
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	75	0	126	75
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1524	-	869	986
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1524	-	865	986
Mov Cap-2 Maneuver	-	-	-	-	865	-
Stage 1	-	-	-	-	943	-
Stage 2	-	-	-	-	971	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.4		8.7	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	986	-	-	1524	-	
HCM Lane V/C Ratio	0.003	-	-	0.005	-	
HCM Control Delay (s)	8.7	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	





HCM 6th TWSC
4: Highway 79 & 38th Avenue

2023 Total
AM Peak

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↘		↙	↘	
Traffic Vol, veh/h	15	1	54	1	1	1	30	95	1	1	178	7
Future Vol, veh/h	15	1	54	1	1	1	30	95	1	1	178	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	1	61	1	1	1	34	108	1	1	202	8
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	386	385	206	416	389	109	210	0	0	109	0	0
Stage 1	208	208	-	177	177	-	-	-	-	-	-	-
Stage 2	178	177	-	239	212	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	573	549	835	547	546	945	1361	-	-	1481	-	-
Stage 1	794	730	-	825	753	-	-	-	-	-	-	-
Stage 2	824	753	-	764	727	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	560	535	835	496	532	945	1361	-	-	1481	-	-
Mov Cap-2 Maneuver	560	535	-	496	532	-	-	-	-	-	-	-
Stage 1	774	729	-	804	734	-	-	-	-	-	-	-
Stage 2	801	734	-	706	726	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	10.4		11			1.8			0			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1361	-	-	750	606	1481	-	-				
HCM Lane V/C Ratio	0.025	-	-	0.106	0.006	0.001	-	-				
HCM Control Delay (s)	7.7	-	-	10.4	11	7.4	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0	-	-				




HCM 6th TWSC
5: Highway 79 & East Site Access

2023 Total
AM Peak

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	27	9	120	230	2
Future Vol, veh/h	5	27	9	120	230	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	31	10	136	261	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	418	262	263	0	-	0
Stage 1	262	-	-	-	-	-
Stage 2	156	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	591	777	1301	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	586	777	1301	-	-	-
Mov Cap-2 Maneuver	586	-	-	-	-	-
Stage 1	776	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.1	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1301	-	739	-	-	
HCM Lane V/C Ratio	0.008	-	0.049	-	-	
HCM Control Delay (s)	7.8	-	10.1	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

HCM 6th TWSC
7: Palmer Avenue & Old Victory Road

2023 Total
AM Peak

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	0	123	13	9	248
Future Vol, veh/h	17	0	123	13	9	248
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	0	140	15	10	282







Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	450	148	0
Stage 1	148	-	-
Stage 2	302	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	567	899	-
Stage 1	880	-	-
Stage 2	750	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	562	899	-
Mov Cap-2 Maneuver	562	-	-
Stage 1	873	-	-
Stage 2	750	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	562	1425
HCM Lane V/C Ratio	-	-	0.034	0.007
HCM Control Delay (s)	-	-	11.6	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC
8: Palmer Avenue & Southeast Site Access

2023 Total
AM Peak

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	126	260	5	9	41
Future Vol, veh/h	34	126	260	5	9	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	143	295	6	10	47
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	301	0	-	0	516	295
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1260	-	-	-	519	744
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	816	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1260	-	-	-	503	744
Mov Cap-2 Maneuver	-	-	-	-	503	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	816	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.7	0		10.7		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1260	-	-	-	685	
HCM Lane V/C Ratio	0.031	-	-	-	0.083	
HCM Control Delay (s)	7.9	-	-	-	10.7	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	

HCM 6th TWSC
9: Palmer Avenue & Middle Commercial Access

2023 Total
AM Peak







Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↗		↗
Traffic Vol, veh/h	0	160	294	7	0	14
Future Vol, veh/h	0	160	294	7	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	182	334	8	0	16
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	334
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	708
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	708
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		10.2	
HCM LOS					B	
Minor Lane/Major Mvmt	EBT		WBT	WBR	SBLn1	
Capacity (veh/h)	-		-	-	708	
HCM Lane V/C Ratio	-		-	-	0.022	
HCM Control Delay (s)	-		-	-	10.2	
HCM Lane LOS	-		-	-	B	
HCM 95th %tile Q(veh)	-		-	-	0.1	

HCM 6th TWSC
10: Palmer Avenue & Greg's Place

2023 Total
AM Peak

Intersection







Int Delay, s/veh 4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	88	140	302	6	20	183
Future Vol, veh/h	88	140	302	6	20	183
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	175	378	8	25	229

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	386	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1172	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1172	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1172	-	-	-	333	669
HCM Lane V/C Ratio	0.094	-	-	-	0.075	0.342
HCM Control Delay (s)	8.4	-	-	-	16.7	13.2
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.2	1.5

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	200	213	430	55	15	160
Future Vol, veh/h	200	213	430	55	15	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	286	304	614	79	21	229




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	693	0	0 1490 614
Stage 1	-	-	- 614 -
Stage 2	-	-	- 876 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	902	-	- 136 492
Stage 1	-	-	- 540 -
Stage 2	-	-	- 407 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	902	-	- 93 492
Mov Cap-2 Maneuver	-	-	- 108 -
Stage 1	-	-	- 369 -
Stage 2	-	-	- 407 -

Approach	EB	WB	SB
HCM Control Delay, s	5.2	0	20.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	902	-	-	-	108	492
HCM Lane V/C Ratio	0.317	-	-	-	0.198	0.465
HCM Control Delay (s)	10.8	-	-	-	46.4	18.5
HCM Lane LOS	B	-	-	-	E	C
HCM 95th %tile Q(veh)	1.4	-	-	-	0.7	2.4




HCM 6th TWSC
1: Northwest Site Access & 38th Avenue

2023 Total
PM Peak

Intersection						
Int Delay, s/veh	2.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	29	14	11	22	10	7
Future Vol, veh/h	29	14	11	22	10	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	16	13	25	11	8
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	49	0	92	41
Stage 1	-	-	-	-	41	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1558	-	908	1030
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1558	-	901	1030
Mov Cap-2 Maneuver	-	-	-	-	901	-
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	971	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.4		8.9	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	950	-	-	1558	-	
HCM Lane V/C Ratio	0.02	-	-	0.008	-	
HCM Control Delay (s)	8.9	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	




HCM 6th TWSC
2: Northeast Site Access & 38th Avenue

2023 Total
PM Peak

Intersection						
Int Delay, s/veh	3.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	33	3	30	32	2	18
Future Vol, veh/h	33	3	30	32	2	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	3	34	36	2	20
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	41	0	144	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	104	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1568	-	849	1031
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	920	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1568	-	830	1031
Mov Cap-2 Maneuver	-	-	-	-	830	-
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	920	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.6		8.7	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1007	-	-	1568	-	
HCM Lane V/C Ratio	0.023	-	-	0.022	-	
HCM Control Delay (s)	8.7	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

HCM 6th TWSC
3: Fire Station Access & 38th Avenue

2023 Total
PM Peak

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	50	0	3	62	0	7
Future Vol, veh/h	50	0	3	62	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	0	3	70	0	8
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	57	0	133	57
Stage 1	-	-	-	-	57	-
Stage 2	-	-	-	-	76	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1547	-	861	1009
Stage 1	-	-	-	-	966	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1547	-	859	1009
Mov Cap-2 Maneuver	-	-	-	-	859	-
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	947	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		8.6	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1009	-	-	1547	-	
HCM Lane V/C Ratio	0.008	-	-	0.002	-	
HCM Control Delay (s)	8.6	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

HCM 6th TWSC
4: Highway 79 & 38th Avenue

2023 Total
PM Peak

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	8	1	49	1	1	1	49	202	1	1	158	16
Future Vol, veh/h	8	1	49	1	1	1	49	202	1	1	158	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	1	56	1	1	1	56	230	1	1	180	18






Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	535	534	189	563	543	231	198	0	0	231	0	0
Stage 1	191	191	-	343	343	-	-	-	-	-	-	-
Stage 2	344	343	-	220	200	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	456	452	853	437	447	808	1375	-	-	1337	-	-
Stage 1	811	742	-	672	637	-	-	-	-	-	-	-
Stage 2	671	637	-	782	736	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	440	433	853	395	428	808	1375	-	-	1337	-	-
Mov Cap-2 Maneuver	440	433	-	395	428	-	-	-	-	-	-	-
Stage 1	778	741	-	644	611	-	-	-	-	-	-	-
Stage 2	642	611	-	729	735	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.3		12.4		1.5		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1375	-	-	744	491	1337	-
HCM Lane V/C Ratio	0.04	-	-	0.089	0.007	0.001	-
HCM Control Delay (s)	7.7	-	-	10.3	12.4	7.7	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	0	-

HCM 6th TWSC
5: Highway 79 & East Site Access

2023 Total
PM Peak

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	18	30	248	202	5
Future Vol, veh/h	3	18	30	248	202	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	20	34	282	230	6

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	583	233	236	0	-	0
Stage 1	233	-	-	-	-	-
Stage 2	350	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	475	806	1331	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	463	806	1331	-	-	-
Mov Cap-2 Maneuver	463	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	713	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1331	-	729	-	-
HCM Lane V/C Ratio	0.026	-	0.033	-	-
HCM Control Delay (s)	7.8	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-




HCM 6th TWSC
6: Palmer Avenue/Highway 79 & Old Victory Road

2023 Total
PM Peak

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↖			↖
Traffic Vol, veh/h	0	9	268	0	0	220
Future Vol, veh/h	0	9	268	0	0	220
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	305	0	0	250
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	305	0	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	735	-	0	0	-
Stage 1	0	-	-	0	0	-
Stage 2	0	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	735	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBTWBLn1		SBT			
Capacity (veh/h)	- 735		-			
HCM Lane V/C Ratio	- 0.014		-			
HCM Control Delay (s)	- 10		-			
HCM Lane LOS	- B		-			
HCM 95th %tile Q(veh)	- 0		-			







HCM 6th TWSC
7: Palmer Avenue & Old Victory Road

2023 Total
PM Peak

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	0	268	29	8	212
Future Vol, veh/h	25	0	268	29	8	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	0	305	33	9	241
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	581	322	0	0	338	0
Stage 1	322	-	-	-	-	-
Stage 2	259	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	476	719	-	-	1221	-
Stage 1	735	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	472	719	-	-	1221	-
Mov Cap-2 Maneuver	472	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13.1	0		0.3		
HCM LOS	B					
Minor Lane/Major Mvmt		NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		-	-	472	1221	-
HCM Lane V/C Ratio		-	-	0.06	0.007	-
HCM Control Delay (s)		-	-	13.1	8	0
HCM Lane LOS		-	-	B	A	A
HCM 95th %tile Q(veh)		-	-	0.2	0	-

HCM 6th TWSC
8: Palmer Avenue & Southeast Site Access

2023 Total
PM Peak

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	110	267	213	24	30	61
Future Vol, veh/h	110	267	213	24	30	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	125	303	242	27	34	69
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	269	0	-	0	795	242
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	553	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1295	-	-	-	357	797
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	576	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1295	-	-	-	322	797
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	721	-
Stage 2	-	-	-	-	576	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.4	0		13.3		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1295	-	-	-	536	
HCM Lane V/C Ratio	0.097	-	-	-	0.193	
HCM Control Delay (s)	8.1	-	-	-	13.3	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.3	-	-	-	0.7	







HCM 6th TWSC
9: Palmer Avenue & Middle Commercial Access








2023 Total
PM Peak

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↗		↗
Traffic Vol, veh/h	0	377	254	20	0	71
Future Vol, veh/h	0	377	254	20	0	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	428	289	23	0	81
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	289
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	750
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	750
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		10.4		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	750		
HCM Lane V/C Ratio	-	-	-	0.108		
HCM Control Delay (s)	-	-	-	10.4		
HCM Lane LOS	-	-	-	B		
HCM 95th %tile Q(veh)	-	-	-	0.4		

HCM 6th TWSC
10: Palmer Avenue & Greg's Place











2023 Total
PM Peak

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	257	337	317	8	40	163
Future Vol, veh/h	257	337	317	8	40	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	286	374	352	9	44	181
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	361	0	-	0	1298	352
Stage 1	-	-	-	-	352	-
Stage 2	-	-	-	-	946	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1198	-	-	-	178	692
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	377	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1198	-	-	-	135	692
Mov Cap-2 Maneuver	-	-	-	-	135	-
Stage 1	-	-	-	-	542	-
Stage 2	-	-	-	-	377	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.9	0		18.3		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1198	-	-	-	135	692
HCM Lane V/C Ratio	0.238	-	-	-	0.329	0.262
HCM Control Delay (s)	8.9	-	-	-	44.2	12
HCM Lane LOS	A	-	-	-	E	B
HCM 95th %tile Q(veh)	0.9	-	-	-	1.3	1

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	1	25	1	1	1	15	135	1	1	260	10
Future Vol, veh/h	15	1	25	1	1	1	15	135	1	1	260	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	50	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	1	28	1	1	1	17	153	1	1	295	11
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	408	485	295	505	496	77	306	0	0	154	0	0
Stage 1	297	297	-	188	188	-	-	-	-	-	-	-
Stage 2	111	188	-	317	308	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	541	481	744	464	474	969	1253	-	-	1425	-	-
Stage 1	711	667	-	796	744	-	-	-	-	-	-	-
Stage 2	883	744	-	693	660	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	533	474	744	441	467	969	1253	-	-	1425	-	-
Mov Cap-2 Maneuver	533	474	-	441	467	-	-	-	-	-	-	-
Stage 1	701	666	-	785	734	-	-	-	-	-	-	-
Stage 2	869	734	-	665	659	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	11		11.6			0.8			0			
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1253	-	-	642	551	1425	-	-				
HCM Lane V/C Ratio	0.014	-	-	0.073	0.006	0.001	-	-				
HCM Control Delay (s)	7.9	-	-	11	11.6	7.5	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-				

HCM 6th TWSC
6: Highway 79 & Palmer Avenue/Old Victory Road





2040 Background
AM Peak

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	10	80	15	10	10	80	95	15	10	205	70
Future Vol, veh/h	45	10	80	15	10	10	80	95	15	10	205	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	11	87	16	11	11	87	103	16	11	223	76
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	476	538	112	416	598	52	299	0	0	119	0	0
Stage 1	245	245	-	277	277	-	-	-	-	-	-	-
Stage 2	231	293	-	139	321	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	472	448	920	521	414	1005	1259	-	-	1467	-	-
Stage 1	737	702	-	706	680	-	-	-	-	-	-	-
Stage 2	751	669	-	850	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	430	414	920	436	383	1005	1259	-	-	1467	-	-
Mov Cap-2 Maneuver	430	414	-	436	383	-	-	-	-	-	-	-
Stage 1	686	697	-	657	633	-	-	-	-	-	-	-
Stage 2	680	623	-	752	645	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	11.5		12.6		3.4		0.3					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1259	-	-	430	810	436	555	1467	-	-		
HCM Lane V/C Ratio	0.069	-	-	0.114	0.121	0.037	0.039	0.007	-	-		
HCM Control Delay (s)	8.1	-	-	14.4	10.1	13.6	11.8	7.5	-	-		
HCM Lane LOS	A	-	-	B	B	B	B	A	-	-		
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0.4	0.1	0.1	0	-	-		

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↵	↑↑	↵	
Traffic Vol, veh/h	120	15	15	145	15	15
Future Vol, veh/h	120	15	15	145	15	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	16	16	158	16	16
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	146	0	249	73
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1434	-	718	974
Stage 1	-	-	-	-	874	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1434	-	710	974
Mov Cap-2 Maneuver	-	-	-	-	710	-
Stage 1	-	-	-	-	864	-
Stage 2	-	-	-	-	901	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.7		9.6	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	821	-	-	1434	-	
HCM Lane V/C Ratio	0.04	-	-	0.011	-	
HCM Control Delay (s)	9.6	-	-	7.5	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	115	150	10	20	10
Future Vol, veh/h	15	115	150	10	20	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	144	188	13	25	13







Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	201	0	0 305 101
Stage 1	-	-	- 195 -
Stage 2	-	-	- 110 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	1368	-	- 663 935
Stage 1	-	-	- 819 -
Stage 2	-	-	- 902 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1368	-	- 654 935
Mov Cap-2 Maneuver	-	-	- 654 -
Stage 1	-	-	- 808 -
Stage 2	-	-	- 902 -

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1368	-	-	-	727
HCM Lane V/C Ratio	0.014	-	-	-	0.052
HCM Control Delay (s)	7.7	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection

Int Delay, s/veh 7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	175	60	60	100	70	120
Future Vol, veh/h	175	60	60	100	70	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	250	86	86	143	100	171

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	229	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1336	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1336	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	6.2	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1336	-	-	-	266	1018
HCM Lane V/C Ratio	0.187	-	-	-	0.376	0.168
HCM Control Delay (s)	8.3	-	-	-	26.5	9.3
HCM Lane LOS	A	-	-	-	D	A
HCM 95th %tile Q(veh)	0.7	-	-	-	1.7	0.6

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	10	1	25	1	1	1	10	285	1	1	220	15
Future Vol, veh/h	10	1	25	1	1	1	10	285	1	1	220	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	50	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	1	28	1	1	1	11	324	1	1	250	17











Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	437	599	250	622	616	163	267	0	0	325	0	0
Stage 1	252	252	-	347	347	-	-	-	-	-	-	-
Stage 2	185	347	-	275	269	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	516	414	788	385	405	854	1295	-	-	1233	-	-
Stage 1	751	698	-	643	634	-	-	-	-	-	-	-
Stage 2	800	634	-	730	686	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	510	410	788	368	401	854	1295	-	-	1233	-	-
Mov Cap-2 Maneuver	510	410	-	368	401	-	-	-	-	-	-	-
Stage 1	745	697	-	638	629	-	-	-	-	-	-	-
Stage 2	791	629	-	702	685	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.7		12.7		0.3		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1295	-	-	669	470	1233	-
HCM Lane V/C Ratio	0.009	-	-	0.061	0.007	0.001	-
HCM Control Delay (s)	7.8	-	-	10.7	12.7	7.9	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-

HCM 6th TWSC
6: Highway 79 & Palmer Avenue/Old Victory Road

2040 Background
PM Peak

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	10	60	15	10	10	50	210	15	10	175	60
Future Vol, veh/h	75	10	60	15	10	10	50	210	15	10	175	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	11	65	16	11	11	54	228	16	11	190	65
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	440	564	95	459	613	114	255	0	0	244	0	0
Stage 1	212	212	-	336	336	-	-	-	-	-	-	-
Stage 2	228	352	-	123	277	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	501	433	943	485	406	917	1307	-	-	1319	-	-
Stage 1	770	726	-	652	640	-	-	-	-	-	-	-
Stage 2	754	630	-	868	680	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	466	412	943	426	386	917	1307	-	-	1319	-	-
Mov Cap-2 Maneuver	466	412	-	426	386	-	-	-	-	-	-	-
Stage 1	738	720	-	625	614	-	-	-	-	-	-	-
Stage 2	702	604	-	789	675	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	12.3		12.7		1.4		0.3					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1307	-	-	466	796	426	543	1319	-	-		
HCM Lane V/C Ratio	0.042	-	-	0.175	0.096	0.038	0.04	0.008	-	-		
HCM Control Delay (s)	7.9	-	-	14.4	10	13.8	11.9	7.8	-	-		
HCM Lane LOS	A	-	-	B	B	B	B	A	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.3	0.1	0.1	0	-	-		

HCM 6th TWSC 8: Southeast Site Access & Palmer Avenue

2040 Background
PM Peak





Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↱	↑↑	↱	
Traffic Vol, veh/h	130	15	15	105	15	15
Future Vol, veh/h	130	15	15	105	15	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	141	16	16	114	16	16
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	157	0	238	79
Stage 1	-	-	-	-	149	-
Stage 2	-	-	-	-	89	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1420	-	729	965
Stage 1	-	-	-	-	863	-
Stage 2	-	-	-	-	924	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1420	-	721	965
Mov Cap-2 Maneuver	-	-	-	-	721	-
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	924	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.9		9.5	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	825	-	-	1420	-	
HCM Lane V/C Ratio	0.04	-	-	0.011	-	
HCM Control Delay (s)	9.5	-	-	7.6	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 6th TWSC
10: Palmer Avenue & Greg's Place

2040 Background
PM Peak

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	115	110	10	30	20
Future Vol, veh/h	10	115	110	10	30	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	135	129	12	35	24







Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	141	0	0 227 71
Stage 1	-	-	- 135 -
Stage 2	-	-	- 92 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	1440	-	- 741 977
Stage 1	-	-	- 877 -
Stage 2	-	-	- 921 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1440	-	- 735 977
Mov Cap-2 Maneuver	-	-	- 735 -
Stage 1	-	-	- 870 -
Stage 2	-	-	- 921 -

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1440	-	-	-	816
HCM Lane V/C Ratio	0.008	-	-	-	0.072
HCM Control Delay (s)	7.5	-	-	-	9.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection

Int Delay, s/veh 5.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	95	65	80	50	60	115
Future Vol, veh/h	95	65	80	50	60	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	127	87	107	67	80	153




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	174	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1400	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1400	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	4.6	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1400	-	-	-	533	1002
HCM Lane V/C Ratio	0.09	-	-	-	0.15	0.153
HCM Control Delay (s)	7.8	-	-	-	12.9	9.2
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0.5	0.5




HCM 6th TWSC
1: Northwest Site Access & 38th Avenue

2040 Total
AM Peak

Intersection						
Int Delay, s/veh	3.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	43	4	10	32	10	30
Future Vol, veh/h	43	4	10	32	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	5	11	36	11	34
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	54	0	110	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	58	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1551	-	887	1016
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1551	-	881	1016
Mov Cap-2 Maneuver	-	-	-	-	881	-
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	965	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.7		8.9	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	979	-	-	1551	-	
HCM Lane V/C Ratio	0.046	-	-	0.007	-	
HCM Control Delay (s)	8.9	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	




HCM 6th TWSC
2: Northeast Site Access & 38th Avenue

2040 Total
AM Peak

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	73	1	8	38	3	26
Future Vol, veh/h	73	1	8	38	3	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	83	1	9	43	3	30
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	84	0	145	84
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1513	-	847	975
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	962	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1513	-	842	975
Mov Cap-2 Maneuver	-	-	-	-	842	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	962	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.3		8.9	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	959	-	-	1513	-	
HCM Lane V/C Ratio	0.034	-	-	0.006	-	
HCM Control Delay (s)	8.9	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 6th TWSC
3: Fire Station Access & 38th Avenue

2040 Total
AM Peak

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	98	1	6	46	0	3
Future Vol, veh/h	98	1	6	46	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	1	7	52	0	3
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	112	0	178	112
Stage 1	-	-	-	-	112	-
Stage 2	-	-	-	-	66	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1478	-	812	941
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	957	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1478	-	808	941
Mov Cap-2 Maneuver	-	-	-	-	808	-
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	957	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.9		8.8	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	941	-	-	1478	-	
HCM Lane V/C Ratio	0.004	-	-	0.005	-	
HCM Control Delay (s)	8.8	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

HCM 6th TWSC
4: Highway 79 & 38th Avenue

2040 Total
AM Peak

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	20	1	80	1	1	1	40	140	1	1	263	12
Future Vol, veh/h	20	1	80	1	1	1	40	140	1	1	263	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	50	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	1	91	1	1	1	45	159	1	1	299	14






Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	471	551	299	604	565	80	313	0	0	160	0	0
Stage 1	301	301	-	250	250	-	-	-	-	-	-	-
Stage 2	170	250	-	354	315	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	489	441	740	396	433	965	1246	-	-	1418	-	-
Stage 1	707	664	-	733	699	-	-	-	-	-	-	-
Stage 2	816	699	-	662	655	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	474	425	740	337	417	965	1246	-	-	1418	-	-
Mov Cap-2 Maneuver	474	425	-	337	417	-	-	-	-	-	-	-
Stage 1	682	663	-	707	674	-	-	-	-	-	-	-
Stage 2	784	674	-	579	654	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.6		12.7		1.8		0	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1246	-	-	662	469	1418	-
HCM Lane V/C Ratio	0.036	-	-	0.173	0.007	0.001	-
HCM Control Delay (s)	8	-	-	11.6	12.7	7.5	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0	0	-

HCM 6th TWSC
5: Highway 79 & East Site Access

2040 Total
AM Peak

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	70	24	176	341	2
Future Vol, veh/h	5	70	24	176	341	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	300	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	80	27	200	388	2











Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	543	195	390	0	-	0
Stage 1	389	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	470	814	1165	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	459	814	1165	-	-	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	639	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1165	-	774	-	-
HCM Lane V/C Ratio	0.023	-	0.11	-	-
HCM Control Delay (s)	8.2	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

HCM 6th TWSC
6: Highway 79 & Palmer Avenue/Old Victory Road

2040 Total
AM Peak

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	13	155	15	12	11	125	126	15	14	298	100
Future Vol, veh/h	62	13	155	15	12	11	125	126	15	14	298	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	14	168	16	13	12	136	137	16	15	324	109









Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	701	779	162	608	872	69	433	0	0	153	0	0
Stage 1	354	354	-	409	409	-	-	-	-	-	-	-
Stage 2	347	425	-	199	463	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	325	326	854	380	287	980	1123	-	-	1425	-	-
Stage 1	636	629	-	590	594	-	-	-	-	-	-	-
Stage 2	642	585	-	784	562	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	278	283	854	264	249	980	1123	-	-	1425	-	-
Mov Cap-2 Maneuver	278	283	-	264	249	-	-	-	-	-	-	-
Stage 1	559	622	-	519	522	-	-	-	-	-	-	-
Stage 2	543	514	-	609	556	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.3		16.7		4.1		0.3	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1123	-	-	278	739	264	387	1425	-	-
HCM Lane V/C Ratio	0.121	-	-	0.242	0.247	0.062	0.065	0.011	-	-
HCM Control Delay (s)	8.6	-	-	22	11.5	19.5	14.9	7.6	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.9	1	0.2	0.2	0	-	-

HCM 6th TWSC
8: Southeast Site Access & Palmer Avenue

2040 Total
AM Peak

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	164	15	15	195	26	15	0	15	51	0	16
Future Vol, veh/h	9	164	15	15	195	26	15	0	15	51	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	178	16	16	212	28	16	0	16	55	0	17







Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	240	0	0	194	0	0	336	470	89	353	458	106
Stage 1	-	-	-	-	-	-	198	198	-	244	244	-
Stage 2	-	-	-	-	-	-	138	272	-	109	214	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1324	-	-	1377	-	-	594	490	951	577	498	928
Stage 1	-	-	-	-	-	-	785	736	-	738	703	-
Stage 2	-	-	-	-	-	-	851	683	-	885	724	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1324	-	-	1377	-	-	574	480	951	559	488	928
Mov Cap-2 Maneuver	-	-	-	-	-	-	574	480	-	559	488	-
Stage 1	-	-	-	-	-	-	779	730	-	732	695	-
Stage 2	-	-	-	-	-	-	825	675	-	863	718	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.5			10.3			11.6		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	716	1324	-	-	1377	-	-	618
HCM Lane V/C Ratio	0.046	0.007	-	-	0.012	-	-	0.118
HCM Control Delay (s)	10.3	7.7	-	-	7.6	-	-	11.6
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

HCM 6th TWSC
9: Palmer Avenue & Middle Commercial Access

2040 Total
AM Peak







Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	175	208	19	12	5
Future Vol, veh/h	9	175	208	19	12	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	300	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	190	226	21	13	5
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	247	0	-	0	341	113
Stage 1	-	-	-	-	226	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1316	-	-	-	629	918
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	897	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1316	-	-	-	624	918
Mov Cap-2 Maneuver	-	-	-	-	624	-
Stage 1	-	-	-	-	784	-
Stage 2	-	-	-	-	897	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.4	0		10.4		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1316	-	-	-	689	
HCM Lane V/C Ratio	0.007	-	-	-	0.027	
HCM Control Delay (s)	7.8	-	-	-	10.4	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

HCM 6th TWSC
10: Palmer Avenue & Greg's Place

2040 Total
AM Peak

Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	137	190	23	46	77
Future Vol, veh/h	41	137	190	23	46	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	300	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	171	238	29	58	96







Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	267	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1294	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1294	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1294	-	-	-	535	910
HCM Lane V/C Ratio	0.04	-	-	-	0.107	0.106
HCM Control Delay (s)	7.9	-	-	-	12.5	9.4
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.4




HCM 6th TWSC
11: Palmer Avenue & 8th Street

2040 Total
AM Peak

Intersection						
Int Delay, s/veh	6.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	175	108	167	100	70	120
Future Vol, veh/h	175	108	167	100	70	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	300	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	250	154	239	143	100	171
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	382	0	-	0	816	120
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	577	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1173	-	-	-	315	909
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1173	-	-	-	248	909
Mov Cap-2 Maneuver	-	-	-	-	249	-
Stage 1	-	-	-	-	612	-
Stage 2	-	-	-	-	525	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.5	0		16.9		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1173	-	-	-	249	909
HCM Lane V/C Ratio	0.213	-	-	-	0.402	0.189
HCM Control Delay (s)	8.9	-	-	-	28.8	9.9
HCM Lane LOS	A	-	-	-	D	A
HCM 95th %tile Q(veh)	0.8	-	-	-	1.8	0.7




HCM 6th TWSC
1: Northwest Site Access & 38th Avenue

2040 Total
PM Peak

Intersection						
Int Delay, s/veh	3.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	44	14	33	32	10	19
Future Vol, veh/h	44	14	33	32	10	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	16	38	36	11	22
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	66	0	170	58
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	112	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1536	-	820	1008
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	913	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1536	-	800	1008
Mov Cap-2 Maneuver	-	-	-	-	800	-
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	913	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.8		9	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	925	-	-	1536	-	
HCM Lane V/C Ratio	0.036	-	-	0.024	-	
HCM Control Delay (s)	9	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	




HCM 6th TWSC
2: Northeast Site Access & 38th Avenue

2040 Total
PM Peak

Intersection						
Int Delay, s/veh	2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	60	3	26	63	2	15
Future Vol, veh/h	60	3	26	63	2	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	3	30	72	2	17
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	71	0	202	70
Stage 1	-	-	-	-	70	-
Stage 2	-	-	-	-	132	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1529	-	787	993
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	894	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1529	-	771	993
Mov Cap-2 Maneuver	-	-	-	-	771	-
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	894	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.2		8.8	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	960	-	-	1529	-	
HCM Lane V/C Ratio	0.02	-	-	0.019	-	
HCM Control Delay (s)	8.8	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

HCM 6th TWSC
3: Fire Station Access & 38th Avenue

2040 Total
PM Peak

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	76	0	3	89	1	6
Future Vol, veh/h	76	0	3	89	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	0	3	101	1	7
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	86	0	193	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	107	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1510	-	796	973
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	917	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1510	-	794	973
Mov Cap-2 Maneuver	-	-	-	-	794	-
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	917	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		8.9	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	943	-	-	1510	-	
HCM Lane V/C Ratio	0.008	-	-	0.002	-	
HCM Control Delay (s)	8.9	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

HCM 6th TWSC
4: Highway 79 & 38th Avenue

2040 Total
PM Peak

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	13	1	69	1	1	1	71	292	1	1	228	21
Future Vol, veh/h	13	1	69	1	1	1	71	292	1	1	228	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	300	-	-	50	-	1000
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	1	78	1	1	1	81	332	1	1	259	24





Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	590	756	259	808	780	167	283	0	0	333	0	0
Stage 1	261	261	-	495	495	-	-	-	-	-	-	-
Stage 2	329	495	-	313	285	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	405	337	779	286	326	849	1278	-	-	1225	-	-
Stage 1	743	692	-	526	545	-	-	-	-	-	-	-
Stage 2	659	545	-	697	675	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	384	315	779	244	305	849	1278	-	-	1225	-	-
Mov Cap-2 Maneuver	384	315	-	244	305	-	-	-	-	-	-	-
Stage 1	696	691	-	493	511	-	-	-	-	-	-	-
Stage 2	615	511	-	625	674	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.4		15.4		1.6		0	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1278	-	-	661	351	1225	-
HCM Lane V/C Ratio	0.063	-	-	0.143	0.01	0.001	-
HCM Control Delay (s)	8	-	-	11.4	15.4	7.9	-
HCM Lane LOS	A	-	-	B	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	0	0	-

HCM 6th TWSC
5: Highway 79 & East Site Access

2040 Total
PM Peak

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	47	79	360	292	5
Future Vol, veh/h	3	47	79	360	292	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	1000	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	53	90	409	332	6











Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	720	169	338
Stage 1	335	-	-
Stage 2	385	-	-
Critical Hdwy	6.84	6.94	4.14
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	363	845	1218
Stage 1	697	-	-
Stage 2	657	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	336	845	1218
Mov Cap-2 Maneuver	336	-	-
Stage 1	645	-	-
Stage 2	657	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1218	-	775	-	-
HCM Lane V/C Ratio	0.074	-	0.073	-	-
HCM Control Delay (s)	8.2	0.2	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

HCM 6th TWSC
6: Highway 79 & Palmer Avenue/Old Victory Road

2040 Total
PM Peak

Intersection												
Int Delay, s/veh	10											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	124	14	181	15	15	14	191	300	15	13	224	101
Future Vol, veh/h	124	14	181	15	15	14	191	300	15	13	224	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	135	15	197	16	16	15	208	326	16	14	243	110









Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	858	1029	122	899	1123	163	353	0	0	342	0	0
Stage 1	271	271	-	742	742	-	-	-	-	-	-	-
Stage 2	587	758	-	157	381	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	251	232	906	234	204	853	1202	-	-	1214	-	-
Stage 1	712	684	-	374	420	-	-	-	-	-	-	-
Stage 2	463	413	-	829	612	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	197	190	906	148	167	853	1202	-	-	1214	-	-
Mov Cap-2 Maneuver	197	190	-	148	167	-	-	-	-	-	-	-
Stage 1	589	676	-	309	347	-	-	-	-	-	-	-
Stage 2	358	342	-	627	605	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29	24.1	3.3	0.3
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1202	-	-	197	713	148	273	1214	-	-
HCM Lane V/C Ratio	0.173	-	-	0.684	0.297	0.11	0.115	0.012	-	-
HCM Control Delay (s)	8.6	-	-	55.5	12.2	32.3	19.9	8	-	-
HCM Lane LOS	A	-	-	F	B	D	C	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	4.2	1.2	0.4	0.4	0	-	-

HCM 6th TWSC
8: Southeast Site Access & Palmer Avenue

2040 Total
PM Peak

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	233	15	15	205	88	15	0	15	72	0	24
Future Vol, veh/h	29	233	15	15	205	88	15	0	15	72	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	253	16	16	223	96	16	0	16	78	0	26







Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	319	0	0	269	0	0	461	668	127	446	588	112
Stage 1	-	-	-	-	-	-	317	317	-	255	255	-
Stage 2	-	-	-	-	-	-	144	351	-	191	333	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1238	-	-	1292	-	-	484	378	900	496	420	920
Stage 1	-	-	-	-	-	-	669	653	-	727	695	-
Stage 2	-	-	-	-	-	-	844	631	-	792	642	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1238	-	-	1292	-	-	457	364	900	473	404	920
Mov Cap-2 Maneuver	-	-	-	-	-	-	457	364	-	473	404	-
Stage 1	-	-	-	-	-	-	652	636	-	708	687	-
Stage 2	-	-	-	-	-	-	810	623	-	758	625	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.4			11.3			13.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	606	1238	-	-	1292	-	-	538
HCM Lane V/C Ratio	0.054	0.025	-	-	0.013	-	-	0.194
HCM Control Delay (s)	11.3	8	-	-	7.8	-	-	13.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.7

HCM 6th TWSC
9: Palmer Avenue & Middle Commercial Access

2040 Total
PM Peak

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	212	184	59	64	29
Future Vol, veh/h	27	212	184	59	64	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	300	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	230	200	64	70	32







Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	264	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1297	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1297	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	11.4
HCM LOS	B		

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1297	-	-	-	665
HCM Lane V/C Ratio	0.023	-	-	-	0.152
HCM Control Delay (s)	7.8	-	-	-	11.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5







HCM 6th TWSC
10: Palmer Avenue & Greg's Place

2040 Total
PM Peak

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	94	179	163	50	61	76
Future Vol, veh/h	94	179	163	50	61	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	300	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	211	192	59	72	89
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	251	0	-	0	520	96
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	328	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1311	-	-	-	486	942
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	702	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1311	-	-	-	445	942
Mov Cap-2 Maneuver	-	-	-	-	445	-
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	702	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.8	0		11.6		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1311	-	-	-	445	942
HCM Lane V/C Ratio	0.084	-	-	-	0.161	0.095
HCM Control Delay (s)	8	-	-	-	14.6	9.2
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0.6	0.3

HCM 6th TWSC
11: Palmer Avenue & 8th Street

2040 Total
PM Peak

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	95	160	189	50	60	115
Future Vol, veh/h	95	160	189	50	60	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	300	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	127	213	252	67	80	153
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	319	0	-	0	613	126
Stage 1	-	-	-	-	252	-
Stage 2	-	-	-	-	361	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1238	-	-	-	424	901
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	676	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1238	-	-	-	380	901
Mov Cap-2 Maneuver	-	-	-	-	447	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	676	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.1	0		11.5		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1238	-	-	-	447	901
HCM Lane V/C Ratio	0.102	-	-	-	0.179	0.17
HCM Control Delay (s)	8.2	-	-	-	14.8	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0.6	0.6

BENNETT PLANNING AND ZONING COMMISSION

RESOLUTION NO. 2022-03

**A RESOLUTION RECOMMENDING APPROVAL OF
A FINAL PLAT FOR BENNETT RANCH FILING NO. 2**

WHEREAS, there has been submitted to the Planning and Zoning Commission of the Town of Bennett a request for approval of a Final Plat for Bennett Ranch Filing No. 2; and

WHEREAS, all materials related to the proposed Final Plat have been reviewed by Town Staff and found with conditions to be in compliance with Town of Bennett subdivision and zoning ordinances; and

WHEREAS, after a noticed public hearing, at which evidence and testimony were entered into the record, the Planning and Zoning Commission finds that the proposed Final Plat should be approved subject to certain conditions.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF BENNETT, COLORADO:

Section 1. The Planning and Zoning Commission hereby recommends approval of the proposed Final Plat for Bennett Ranch Filing No. 2, subject to the conditions set forth on Exhibit A, attached hereto and incorporated herein by reference.

PASSED AND ADOPTED this 24th DAY OF JANUARY 2022.

ATTEST:

DocuSigned by:
Christina Hart
00366DAA7ED246D...
Christina Hart, Town Clerk

DocuSigned by:
[Signature]
43EB4A13E4AD471...
Chairperson

EXHIBIT A
Bennett Ranch Filing No. 2 Final Plat
Conditions of Approval

Before recording the final plat, the applicant shall:

1. update plat notes related to easements and maintenance in a manner directed by the Town Engineer
2. make other minor modifications as directed by Town Staff, Engineer and Town Attorney.

RESOLUTION NO. 905-22

**A RESOLUTION APPROVING A FINAL PLAT FOR
BENNETT RANCH FILING NO. 2**

WHEREAS, there has been submitted to the Board of Trustee of the Town of Bennett a request for approval of a Final Plat for Bennett Ranch Filing No. 2; and

WHEREAS, all materials related to the proposed Final Plat have been reviewed by Town Staff and the Bennett Planning and Zoning Commission and found to be in compliance with the Land Use and Development Regulations in Chapter 16 of the Bennett Municipal Code; and

WHEREAS, after a noticed public hearing, at which evidence and testimony were entered into the record, the Board of Trustees finds that the proposed Final Plat should be approved subject to certain conditions.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE
TOWN OF BENNETT, COLORADO:**

Section 1. The Board of Trustees hereby approves the proposed Final Plat for Bennett Ranch Filing No. 2, subject to the conditions set forth on Exhibit A, attached hereto and incorporated herein by reference.

PASSED AND ADOPTED THIS 22ND DAY OF FEBRUARY 2022.

TOWN OF BENNETT

Royce D. Pindell, Mayor

ATTEST:

Christina Hart
Town Clerk

EXHIBIT A
Bennett Ranch Filing No. 2 Final Plat
Conditions of Approval

Before recording the final plat, the applicant shall:

1. Update plat notes related to easements and maintenance in a manner directed by the Town Engineer.
2. Make other minor modifications as directed by Town Staff, Engineer and Town Attorney.

Suggested Motion

I move to approve Resolution No. 905-22 - A resolution approving a final plat for Bennett Ranch Filing No. 2 with the following conditions:

1. Update plat notes related to easements and maintenance in a manner directed by the Town Engineer.
2. Make other minor modifications as directed by Town Staff, Engineer and Town Attorney.

STAFF REPORT



welcome neighbors.

TO: Mayor and Town of Bennett Board of Trustees
FROM: Robin Price, Public Works Director
DATE: February 22, 2022
SUBJECT: RFP 22-002 - Bennett Regional Park and Open Space Lower Pond Fishing Improvements

Background

The Town of Bennett secured a grant from Arapahoe County Open Space to help design and construct a fishing pond at Bennett Regional Park and Open Space Lower Pond (BRPOS). The purpose of the grant project is to turn the lower pond at BRPOS into a recreational fishing pond that will be open and free to the public while still providing adequate storage for existing and future storm water drainage.

The Town issued a request for proposal (RFP) on January 13, 2022, for Bennett Regional Park and Open Space Lower Pond Fishing Improvements. Town Staff is committed to recruiting the best talent and resources to build the Town of Bennett's improvements and infrastructure. As a result, the Town team personally approached and invited five known, trusted and highly-qualified civil construction firms that have successfully provided high-performance improvements in the Town previously.

The work outlined and required by this RFP is unique, and even a bit challenging due to the mix of tasks, and some of the salvage and reuse, as well as high-care items involved. As a result, the Town had only two contractors respond to the RFP. However, both responding firms were very active and thorough, and asked numerous insightful questions about the project. Below is a summary of the responses received for RFP 22-002 and the prior Town experience for each. Proposals were due on February 10 at 2:00 p.m.

Summary of RFP Bids

The Town received the following qualified responses:

- **Kuhn Construction, Inc.:** Kuhn Construction, Inc. is a local company that has worked on numerous projects throughout the Town including the most recent BRPOS trail construction and upper pond repurposing. Kuhn Construction, Inc. met all the RFP criteria and also gave some additional insight and recommendations on the existing pond liner recommendations.
- **Anson Excavating & Pipe, Inc.:** Anson Excavating is located in Craig, CO and have worked with the Town on a few utility and concrete projects. Anson Excavating met all of the RFP criteria.

Company	Bid
Kuhn Construction, Inc.	\$785,574.97
Anson Excavating & Pipe, Inc.	\$1,027,728.85 Includes 3% bond cost

Staff Review

After a thorough evaluation of the contractors and their submitted bids, Staff believes both companies would be qualified to complete this project. When comparing the two bids with the current grant budget of \$650,000 (\$487,500 Grant and Cash Match of \$162,500 from the reserved Antelope Hills Redemption Fund located in the General Fund) both bids exceeded the current budget. Town Staff conducted a meeting with Kuhn Construction, Inc. to include a phased approach so Town Staff can proceed with the current grant. Anson Excavating due to mobilization and base costs of the bid could not fit into the current budget.

Kuhn Construction, Inc. while providing their pricing met with Raven Industries on-site to conduct a detailed evaluation, to address the pond liner as a spliced "curtain" area reduction per the RFP instruction. From their investigation, the Kuhn-Raven team determined the current liner was sun damaged and had a large potential to leak due to the existing liner age of over 15 years.

Town Staff worked diligently with Kuhn Construction, Inc. to carefully and thoughtfully reduce the base scope of the original RFP-requested fishing pond improvements, and in turn to upgrade the critical improvement of providing an entirely new, earth-protected and UV-ray resistant liner for the final fishing pond area. The pond liner is the foundation of the fishing pond and Staff's sense was that the pond and fishing amenity will never be more successful than its ability to hold onto our precious Town water.

After Town Staff met with Kuhn Construction, Inc. to determine priority and costs Kuhn Construction, Inc. updated their proposal to remove specific items that Town Staff will need to add to a second phase of the Fishing Pond Grant. The updated proposal from Kuhn Construction, Inc. dated February 10, 2022, includes the reduced scope with the updated full liner.

Company	Bid
Kuhn Construction, Inc. Updated Scope	\$574,000.00

Staff Recommendation

Staff recommends the Board authorize the Mayor and the Town of Bennett to enter into a standard Town contract agreement with the updated Kuhn Construction, Inc. proposal dated February 10, 2022, in the amount not to exceed \$574,000.00.

Attachments

1. RFP 22-002
2. Plan Set 1-13-22
3. Kuhn Construction, Inc.
4. Kuhn Construction, Inc. Revised Bid
5. Anson Excavating & Pipe, Inc.
6. Addendum #1 Request for Information Responses

REQUEST FOR PROPOSALS

Cover Sheet



welcome neighbors.

Date of RFP Issuance: 1/13/22
Project Number: 22-002
RFP Title: Bennett Regional Park and Open Space Lower Pond Fishing Improvements
Proposals Due: February 10, 2:00 p.m., Local Time
Submit Proposals to: rprice@bennett.co.us

Town Hall, 207 Muegge Way, Bennett, CO 80102-7806

For Additional Information Please Contact: Dan Giroux
(303) 644-3249 Ext. 1009
Email: dangiroux@terramax.us

Documents Included in This Package:

- RFP Cover Sheet
- Project Background and Specifications
- RFP Instructions
- Terms and Conditions
- Special Terms and Conditions
- Pricing Form
- Submission Form
- Substitute Form W-9
- Sample Agreement

If any of the documents listed above are missing from this package, they may be requested via email or picked up at Town Hall, 207 Muegge Way, Bennett, Colorado.

The undersigned hereby affirms that (1) he/she is a duly authorized agent of the Proposer, (2) he/she has read all terms and conditions and technical specifications which were made available in conjunction with this RFP and fully understands and accepts them unless specific variations have been expressly listed in his/her offer, (3) the offer is being submitted on behalf of the Proposer in accordance with any terms and conditions set forth in this RFP, and (4) the Proposer will accept any awards made to it as a result of the offer submitted herein for a minimum of ninety calendar days following the date of submission.

PRINT OR TYPE YOUR INFORMATION

Name of Company: _____ Fax: _____
Address: _____ City/State: _____ Zip: _____
Contact Person: _____ Title: _____ Phone: _____
Authorized Representative's Signature: _____ Phone: _____
Printed Name: _____ Title: _____ Date: _____
Email Address: _____

PROJECT BACKGROUND AND SPECIFICATIONS

I BACKGROUND

The Town of Bennett ("Town") desires to solicit proposals from interested firms or persons to provide final design and construction for the **Bennett Regional Park and Open Space Lower Pond Fishing Improvements**. This document sets forth general information and requirements for persons and firms ("Proposers") interested in submitting "Proposals" in response to this Request for Proposals ("RFP").

II PROJECT DESCRIPTION

Town of Bennett secured a grant from Arapahoe County Open Space to help design and construct a fishing pond at Bennett Regional Park and Open Space Lower Pond (BRPOS). The purpose of the grant project is to turn the lower pond at BRPOS into a recreational fishing pond that would be open and free to the public. The grant for this project includes construction of an ADA compliant trailhead, access ramp, shaded picnic area, and water infrastructure improvements.

III SCOPE OF WORK

The Bennett Regional Park and Open Space Lower Pond Fishing Improvements can be bid using the Terramax, Inc. Consulting and Engineering Construction Plans dated 1/13/22. The project plans include Cover Sheet, General Notes and Specifications, Existing Site Plan, Right-of-Way Exhibit, Proposed Site Plan, Proposed Grading Plan, Trail Details, Pond Details, Erosion Control Plan, Erosion Control Details 1, Erosion Control Details 2, Entry Road Plan and Profile, Entry Road Details, and Pond Plan and Profile.

General quantities and description of work include the following:

- New 4' wide pond perimeter trail 500 L.F., 150 L.F.
 - New 6' wide trail connection 290 L.F., Parking Lot Access 150 L.F., 18' wide maintenance access 90 L.F.
 - 8' wide Pond Access Trail 200 L.F.
 - Shoreline Fishing with Boulder Edge per Plan
 - 8' Wide Boardwalk 150 L.F. per Proposer's design-build, including foundations
 - One (1) small shelter per Proposer's design-build, including foundation 16X16
 - One (1) large shelter per Proposer's design-build, including foundation 24X24
 - Four (4) 24" diameter galvanized Corrugated Steel Pipe (CSP) Culverts
 - Two (2) 20'X50'X4' Deep Grouted Rip Rap Overflow – Outfall
 - One 35'X120'X4' Deep Plunge Pool
 - 7,000 square feet (SF) 80-mil HDPE or equivalent pond liner installation, with splice to existing
 - Grading Volumes:
 - Cut: 18,809 cy
 - Fill: 13,020* cy
 - Net: 5,789 cy (Cut)
- *Assuming 10% shrinkage

IV PROJECT SCHEDULE

Anticipated milestones for the Project are as follows:

Anticipated Start Date: 2/28/22

Anticipated Completion Date: 5/31/22

RFP INSTRUCTIONS

I QUESTIONS ABOUT RFP

All project inquiries regarding this RFP shall be made in writing to Dan Giroux dangiroux@terramax.us no later than five (5) days before Proposals are due.

II AMENDMENTS TO RFP

The Town reserves the right to amend this RFP by an addendum at any time prior to the date set for receipt of Proposals. Addenda or amendments will be posted on the Town's website as soon as available, and it shall be the responsibility of the Proposer to obtain all addenda. If revisions are of such a magnitude to warrant, in the Town's opinion, the postponement of the date for receipt of Proposals, an addendum will be issued announcing the new date.

III CONTENTS OF PROPOSAL

The Proposal shall contain, at a minimum, the following information:

1. Statements of Qualifications including:
 - i. General firm information including length of time in business
 - ii. Resumes of key project personnel and percent of team that is local
 - iii. Location of key project personnel and availability
2. Proposed Project team including Project Manager and proposed subcontractors (if any). Include information on subcontractors, including subcontractor personnel who will be working on the project and their specific roles.
3. Approach to completing the Project, including addressing the elements of the Scope of Services contained within this RFP, and any additional anticipated issues and proposed strategies for addressing the issues based on additional insight, capabilities or perspectives of the Proposer.
4. Project descriptions and references from at least three projects with similar size, type, and scope. These projects should demonstrate the experience of the project team and should have been completed during the past five years. The descriptions should include whether the project was completed on time and within budget per the original schedule and budget; any discrepancies should be explained.
5. Proposed schedule to complete the Project.
6. Detailed fee schedule tied to the Scope of Services, including a "Not to Exceed" contract amount and hourly rates of key personnel.
7. Signed copy of the cover page of this RFP (page 1 of this RFP)
8. Completed Pricing Form (form attached)

9. Completed Submission Form (form attached)
10. Completed Sample W-9 (form attached)
11. List any requested deviations from the attached Sample Agreement

IV INSTRUCTIONS FOR SUBMITTING PROPOSAL

One (1) copy of the Proposal shall be submitted via email, hand-delivery or mail to:

Town of Bennett
Attn: **Robin Price**
Town Hall
207 Muegge Way
Bennett, CO 80102-7806
Email: **rprice@bennett.co.us**

Hand-delivered or mailed Proposals shall be submitted in a sealed envelope and clearly marked with the title of the RFP.

For emailed Proposals, include the RFP title in the subject line. **Please note that email responses are limited to a maximum of 20 MB capacity. It is the sole responsibility of the Proposer to ensure their Proposal is received before the Proposal deadline. The Town does not accept responsibility under any circumstance for delayed or failed email or mail submittals.**

Proposals received after the Proposal deadline shall be considered non-responsive.

V MODIFICATIONS TO OR WITHDRAWAL OF PROPOSALS.

Proposals may only be modified in the form of a written notice on company letterhead and must be received prior to the Proposal deadline.

Proposals may be withdrawn prior to Proposal deadline. Such requests must be made in writing on company letterhead. Proposals may not be withdrawn after the Proposal deadline for a period of ninety (90) calendar days. If a Proposal is withdrawn during this ninety-day period, the Town may, at its option, choose not to accept any Proposal from the Proposer for a six-month period following the withdrawal.

VI EVALUATION CRITERIA

Proposals shall be reviewed and evaluated by Town staff and/or consultants who may request additional information from Proposers or request interviews with one of more Proposers. Final evaluation and selection may be based on, but not limited to any of the following:

1. Qualifications of the Proposer
2. Reference checks
3. Total cost or proposed pricing
4. Ability of the Proposer to provide quality and timely services and products

VII ANTICIPATED SCHEDULE

The following activities and dates are just a tentative outline of the process to be used by the Town.

January 13, 2022	Issue Request for Proposal
February 10, 2022	Proposal Submittal Deadline
February 10, 2022	Bid Opening – Please Note: NOT a Public Bid Opening!
February 23, 2022	Award Notification
February 24, 2022	Award Contract

TERMS AND CONDITIONS

1. **Responses to RFP.** All Proposals shall become the property of the Town upon receipt and will not be returned to the Proposer. Selection or rejection will not affect this right. Any confidential/proprietary information submitted in response to this request shall be readily identified, clearly marked and separated from the rest of the response. Co-mingling of confidential/proprietary and other information is not acceptable. Submittals will be handled in accordance with applicable federal and state public records laws and procurement regulations. Neither cost information nor the total Proposal will be considered confidential/proprietary.
2. **Rejection Rights.** The Town reserves the right to reject all Proposals and re-solicit if deemed by the Town to be in its best interests, and to abandon the Project and this RFP at any time for any or no reason. The Town is not obligated to accept the lowest cost proposed, is not obligated to accept any Proposal, and will make its determination based on the best interests of the Town.
3. **Other Conditions; Reservation of Rights.** This is a solicitation and not an offer to contract. The provisions in this RFP and any procurement or purchasing policies or procedures of the Town are solely for the fiscal responsibility of the Town and confer no rights, duties, or entitlements to any party submitting responses to this solicitation. The Town reserves the right to issue clarifications and other directives concerning this RFP, to make and issue modifications to the RFP schedule; to require clarification or further information with respect to any response or Proposal received; to waive any informalities or irregularities; and to determine the final scope and terms of any contract, and whether to enter any contract. The provisions herein confer no rights, duties or entitlements to any Proposer.
4. **Proposer's Responsibilities.** Proposer shall make all investigations necessary to thoroughly inform themselves regarding the Project and are expected to examine the drawings, specifications, schedule of delivery, and all instructions. Failure to do so is at the risk of the Proposer.
5. **Costs of Response Preparation and Other Charges.** Proposers are solely responsible for all costs of preparing their proposals and participation in this RFP, and the Town assumes no responsibility for payment of any expenses incurred by a Proposer as part of this process. For the selected firm, no reimbursement will be made by the Town for any costs incurred prior to full execution of a contract and issuance of written notice by the Town to commence Project services.
6. **Agreement Required.** A written agreement will be required between the Town and the selected Proposer, which agreement will be in the form and substance required by the Town. A sample agreement is included with this RFP, but the Town reserves the right to modify the terms and conditions thereof. The agreement shall include insurance requirements for both general liability and errors and omissions.
7. **Taxes.** Proposers shall not include federal, state, or local excise or sales taxes in prices offered, as the Town is exempt from payment of such taxes. Town tax identification numbers will be

made available to the selected contractor.

8. **Pricing.** Proposers may offer a cash discount for prompt payment. Discounts will be considered in determining the lowest net cost for the evaluation of Proposals; discounts for periods of less than twenty days, however, will not be considered in making the award. Proposers are encouraged to provide their prompt payment terms in the space provided on the Pricing Form. If no prompt payment discount is being offered, the Proposer shall enter a zero (0) for the percentage discount to indicate net thirty days.
9. **No Collusion.** The Proposer, by affixing its signature to this RFP, certifies that its Proposal is made without previous understanding, agreement, or connection either with any persons, firms or corporations making a Proposal for the same items, or with the Town. The Proposer also certifies that its Proposal is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action. To ensure integrity of the Town's public procurement process, all Proposers are hereby placed on notice that any and all Proposers who falsify the certifications required in conjunction with this section will be prosecuted to the fullest extent of the law.
10. **Elimination from Consideration.** A Proposal may not be accepted from, nor any contract be awarded to, any person or firm which is in arrears to the Town upon any debt or contract or which is a defaulter as surety or otherwise upon any obligation to the Town. A Proposal may not be accepted from, nor any contract awarded to, any person or firm which has failed to perform faithfully any previous contract with the Town, state or federal government, for a minimum period of three years after this previous contract was terminated for cause.
11. **Equal Opportunity.** The Town intends and expects that the contracting processes of the Town and its vendors provide equal opportunity without regard to gender, race, ethnicity, religion, age or disability and that its vendors make available equal opportunities to the extent third parties are engaged to provide goods and services to the Town as subcontractors, vendors, or otherwise. Accordingly, the vendor shall not discriminate on any of the foregoing grounds in the performance of the contract, and shall make available equal opportunities to the extent third parties are engaged to provide goods and services in connection with performance of the contract.

SPECIAL TERMS AND CONDITIONS

COMPETENCY OF CONTRACTORS - MINIMUM YEARS OF EXPERIENCE AND OPERATIONAL

FACILITIES REQUIRED: Pre-award inspection of the Proposer's facility may be made prior to award of contract. Responses will only be considered from Proposer which have been engaged in the business of performing services as described in this RFP for a minimum period of five (5) years prior to the date of this RFP. The Proposer must be able to produce evidence that they have an established satisfactory record of performance for a reasonable period of time and have sufficient financial support, equipment and organization to ensure that they can satisfactorily execute the services if awarded a contract. The term 'equipment and organization' as used herein shall be construed to mean a fully equipped and well established company in line with the best business practices in the industry and as determined by the proper authorities of the Town. The Town reserves the right, before awarding the contract, to require a Proposer to submit such evidence of its qualifications as it may deem necessary, and may consider any evidence available to it (including, but not limited to, the financial, technical and other qualifications and abilities of the Proposer, including past performance and experience with the Town) in making the award in the best interests of the Town.

QUALIFICATIONS OF CONTRACTOR: The Town may make such investigations as deemed necessary to determine the ability of the Proposer to perform work, and the Proposer shall furnish all information and data for this purpose as the Town requests. Such information includes but not limited to: current/maximum bonding capabilities, current licensing information, audited financial statements, history of the firm on assessments of liquidated damages, contracts cancelled prior to completion and/or lawsuits and/or pending lawsuits against the firm and/or its principals. The Town reserves the right to reject any Proposal if the evidence submitted by, or investigation of, such Proposer fails to satisfy the Town that such Proposer is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.

NON-APPROPRIATION: Pursuant to C.R.S. § 29-1-110, as amended, financial obligations of the Town after the current fiscal year are contingent upon funds for the purpose being appropriated, budgeted and otherwise available. Any contract entered with respect to this project will provide that it is automatically terminated on January 1st of the first fiscal year for which funds are not appropriated. The Town shall give the Proposer or written notice of such non-appropriation.

MATERIAL PRICED INCORRECTLY: As part of any award resulting from this process, Proposer(s) will discount all transactions as agreed. In the event the Town discovers, through its contract monitoring process or formal audit process, that material was priced incorrectly, Proposer (s) agree to promptly refund all overpayments and to pay all reasonable audit expenses incurred as a result of the non-compliance.

JOINT VENTURES ARE ENCOURAGED. The Proposer shall disseminate information regarding all subcontracting opportunities under this contract in a manner reasonably calculated to reach all qualified potential subcontractors who may be interested. The Proposer shall maintain records demonstrating its compliance with this article and shall make such records available to the Town upon the Town's request.

PRICING FORM

I PRICING (FOR EACH PARTICIPANT)

ITEM	QTY	UNIT	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1			See Construction Plans		\$0.00
2					\$0.00
3					\$0.00
4					\$0.00
5					\$0.00
6					\$0.00
7					\$0.00
8					\$0.00
9					\$0.00
10					\$0.00
Total					\$0.00

Not to Exceed Total:

SUBMISSION FORM

SUBMISSION: It is imperative, when submitting a bid/proposal, that you address the envelope as follows:

Town of Bennett
ATTN: Purchasing
207 Muegge Way
Bennett, CO 80102

Attn: Robin Price
Public Works Director
RFP: 22-002 BRPOS Lower Pond Fishing Improvements

Does your proposal comply with all the terms and conditions? If no, indicate exceptions YES / NO

Does your proposal meet or exceed all specifications? If no, indicate exceptions YES / NO

State percentage of prompt payment discount, if offered _____ %

State total bid price (include all items bid) _____

State total bid price with discount _____

The Town of Bennett must have on file a completed W-9 prior to doing business with Contractors. Please submit the attached form with your Proposal.

SUBSTITUTE FORM W-9
REQUEST FOR TAXPAYER
IDENTIFICATION NUMBER AND CERTIFICATION
(A copy of the W-9 instructions is available upon request)

Vendor# _____

1 NAME OF FIRM:

NAME (Legal Name)

BUSINESS NAME (If different from above e.g. DBA)

2 ADDRESS WHERE NOTIFICATIONS, PURCHASE ORDERS ETC. SHOULD BE MAILED
(if different from above):

NAME (As it appears on invoice)

ADDRESS

CITY, STATE, ZIP

3. PAY TO OR REMITTANCE INFORMATION

(If more than one remit to address, please attach on additional page.)

STREET ADDRESS

CITY, STATE, ZIP

The Internal Revenue Service requires that you submit a Taxpayer Identification Number to comply with this regulation, please fill in the required information on this form, sign and return it to:

By fax (303) 644-4125
By mail Town of Bennett
ATTN: Danette Ruvalcaba
207 Muegge Way
Bennett, CO 80102

TAXPAYER IDENTIFICATION NUMBER (TIN)

Social Security Number _____-_____-_____
OR
Federal Identification Number _____-_____

Name of Business Owner (please print) _____

Check Appropriate Box:

<input type="checkbox"/> Corporation	<input type="checkbox"/> Partnership	<input type="checkbox"/> Government	
<input type="checkbox"/> Individual/Sole Prop	<input type="checkbox"/> Non-Profit Organization	<input type="checkbox"/> Other	

(Must explain)

CERTIFICATION

Under penalties of perjury, I certify that:

- (1) The number shown on this form is my correct Tax Identification Number, and
- (2) I am not subject to backup withholding.
- (3) I am a US person (including a US resident alien)

Signature_____

Date_____

Print Name_____

Telephone Number ()

**NOTICE! CHECKS OR PURCHASE ORDERS WILL NOT BE ISSUED BY THE TOWN OF BENNETT
UNTIL YOUR TAX PAYER ID NUMBER IS ON FILE IN THIS OFFICE!**

FOR OFFICE USE ONLY:

Individual/Sole Proprietorships: For Corporation:

<input type="checkbox"/> Merchandise Only	<input type="checkbox"/> Services	<input type="checkbox"/> Attorney
<input type="checkbox"/> Employee expense reimbursement	<input type="checkbox"/> Contract Labor	<input type="checkbox"/> Non Attorney
<input type="checkbox"/> Garnishment / Child Support	<input type="checkbox"/> Other (Explain)	
<input type="checkbox"/> Damage awards & other reimb	<input type="checkbox"/> Sale of Land	

Approved:

Town Administrator

Date

SAMPLE AGREEMENT

INDEPENDENT CONTRACTOR AGREEMENT BY AND BETWEEN THE TOWN OF BENNETT AND _____

1.0 PARTIES

The parties to this Agreement are the **Town of Bennett**, a Colorado municipal corporation, hereinafter referred to as the “Town,” and _____[**contractor name**]____, a Colorado _____[contractor business entity]____, hereinafter referred to as the “Contractor.”

2.0 RECITALS AND PURPOSE

- a) The Town desires to engage the Contractor for the purpose of providing services as further set forth in the Contractor’s Scope of Services (which services are hereinafter referred to as the “Services”).
- b) The Contractor represents that it has the special expertise, qualifications and background necessary to complete the Services.

3.0 SCOPE OF SERVICES

The Contractor agrees to provide the Town with the specific Services and to perform the specific tasks, duties and responsibilities set forth in Scope of Services attached hereto as Exhibit A and incorporated herein by reference. The Contractor shall furnish all tools, labor and supplies in such quantities and of the proper quality as are necessary to professionally and timely perform the Services. The Contractor acknowledges that this Agreement does not grant any exclusive privilege or right to supply Services to the Town. In its sole discretion, the Town may contract with other contractors to provide the same or similar services during the term of this Agreement.

4.0 COMPENSATION

- a) The Town shall pay the Contractor for Services under this agreement a total not to exceed the amounts set forth in Exhibit A attached hereto and incorporated herein by this reference. For Services compensated on a per-task basis, such costs per task shall not exceed the amounts set forth in Exhibit A. The Town shall pay mileage and other reimbursable expenses which are deemed necessary for performance of the services and which are pre-approved by the Town Administrator. The foregoing amounts of compensation shall be inclusive of all costs of whatsoever nature associated with the Contractor’s efforts, including but not limited to salaries, benefits, overhead, administration, profits, expenses, and outside contractor fees. The Scope of Services and payment therefor shall only be changed by a properly authorized amendment to this Agreement. No Town employee has the authority to bind the Town with regard to any payment for any services which exceeds the amount payable under the terms of this Agreement.
- b) The Contractor shall submit monthly an invoice to the Town for Services rendered and a detailed expense report for pre-approved, reimbursable expenses incurred during the previous month. The invoice shall document the Services provided during the preceding month, identifying by work category and subcategory the work and tasks performed and such other information as may be required by the Town. The Contractor shall provide such additional backup documentation as may be required by the Town. The Town shall pay the invoice within thirty (30) days of receipt unless the Services or the documentation therefor are unsatisfactory. Payments made after thirty (30) days

may be assessed an interest charge of one and one-half percent (1.5%) per month unless the delay in payment resulted from unsatisfactory work or documentation therefor.

5.0 PROJECT REPRESENTATION

- a) The Town designates _____[staff member]_, _____[staff title]_, as the responsible Town staff to provide direction to the Contractor during the conduct of the Services. The Contractor shall comply with the directions given by said Town staff and such person's designees.
- b) The Contractor designates _____[Contractor's project manager's name]_ as its project manager and as the principal in charge who shall be providing the Services under this Agreement. Should any of the representatives be replaced, and such replacement require the Town or the Contractor to undertake additional reevaluations, coordination, orientations, etc., the Contractor shall be fully responsible for all such additional costs and services.

6.0 TERM

The term of this Agreement shall be _____[start date]_, 20__ to _____[end date]_, unless the Agreement is sooner terminated pursuant to Section 13, below. The Contractor's services under this Agreement shall commence upon execution of this Agreement by the Town and shall progress so that the Services are completed in a timely fashion consistent with the Town's requirements. Nothing in this Agreement is intended or shall be deemed or construed as creating any multiple-fiscal year direct or indirect debt or financial obligation on the part of the Town within the meaning of Colorado Constitution Article X, Section 20 or any other constitutional or statutory provision. All financial obligations of the Town under this Agreement are subject to annual budgeting and appropriation by the Bennett Board of Trustees, in its sole discretion.

7.0 INSURANCE

- a) The Contractor agrees to procure and maintain, at its own cost, the policies of insurance set forth in Subsections 7.1.1 through 7.1.3. The Contractor shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types. The coverages required below shall be procured and maintained with forms and insurers acceptable to the Town. All coverages shall be continuously maintained from the date of commencement of services hereunder. The required coverages are:

7.1.1 Workers' Compensation insurance as required by the Labor Code of the State of Colorado and Employers Liability Insurance. Evidence of qualified self-insured status may be substituted.

7.1.2 General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) aggregate. The policy shall include the Town of Bennett, its officers and its employees, as additional insureds, with primary coverage as respects the Town of Bennett, its officers and its employees, and shall contain a severability of interests provision.

7.1.3 Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than THREE HUNDRED AND FIFTY THOUSAND DOLLARS (\$350,000) per person in any one occurrence and ONE MILLION DOLLARS (\$1,000,000) for two or more persons in any one occurrence, and auto property

damage insurance of at least FIFTY THOUSAND DOLLARS (\$50,000) per occurrence, with respect to each of Contractor's owned, hired or non-owned vehicles assigned to or used in performance of the services. The policy shall contain a severability of interests provision. If the Contractor has no owned automobiles, the requirements of this paragraph shall be met by each employee of the Contractor providing services to the Town of Bennett under this contract.

- 7.1.4 If the Services include the performance of professional services (e.g., architect, engineer, accountant, attorney), Professional Liability coverage with minimum combined single limits of ONE MILLION DOLLARS (\$1,000,000) per claim and TWO MILLION DOLLARS (\$2,000,000) aggregate.
- 7.2 The Contractor's general liability insurance, automobile liability and physical damage insurance shall be endorsed to include the Town, and its elected and appointed officers and employees, as additional insureds, unless the Town in its sole discretion waives such requirement. Every policy required above shall be primary insurance, and any insurance carried by the Town, its officers, or its employees, shall be excess and not contributory insurance to that provided by the Contractor. Such policies shall contain a severability of interests provision. The Contractor shall be solely responsible for any deductible losses under each of the policies required above.
- 7.3 Certificates of insurance shall be provided by the Contractor as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be subject to review and approval by the Town. No required coverage shall be cancelled, terminated or materially changed until at least 30 days prior written notice has been given to the Town. The Town reserves the right to request and receive a certified copy of any policy and any endorsement thereto.
- 7.4 Failure on the part of the Contractor to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which the Town may immediately terminate the contract, or at its discretion may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the Town shall be repaid by Contractor to the Town upon demand, or the Town may offset the cost of the premiums against any monies due to Contractor from the Town.
- 7.5 The parties understand and agree that the Town is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, § 24-10-101 et seq., 10 C.R.S., as from time to time amended, or otherwise available to the Town, its officers, or its employees.

8.0 INDEMNIFICATION

To the fullest extent permitted by law, the Contractor agrees to indemnify and hold harmless the Town, and its elected and appointed officers and its employees, from and against all liability, claims, and demands, on account of any injury, loss, or damage, which arise out of or are connected with the services hereunder, if such injury, loss, or damage is caused by the negligent act, omission, or other fault of the Contractor or any subcontractor of the Contractor, or any officer, employee, or agent of the Contractor or any subcontractor, or any other person for whom Contractor is responsible. The Contractor shall investigate, handle, respond to, and provide defense for and defend against any such liability, claims, and demands. The Contractor shall further bear all other costs and expenses incurred by the Town or Contractor and related to any such liability, claims and demands, including but not limited to court costs, expert witness fees and attorneys'

fees if the court determines that these incurred costs and expenses are related to such negligent acts, errors, and omissions or other fault of the Contractor. The Town shall be entitled to its costs and attorneys' fees incurred in any action to enforce the provisions of this Section 8.0. The Contractor's indemnification obligation shall not be construed to extend to any injury, loss, or damage which is caused by the act, omission, or other fault of the Town.

9.0 QUALITY OF WORK

Contractor's professional services shall be in accordance with the prevailing standard of practice normally exercised in the performance of services of a similar nature in the Denver metropolitan area.

10.0 INDEPENDENT CONTRACTOR

The parties agree that the Contractor is an independent contractor and not an employee of the Town and any persons employed by Contractor for the performance of work hereunder shall be independent contractors and not agents of the Town. Contractor shall have the right to contract and represents that it does contract for similar services with others. Any provisions in this Agreement that may appear to give the Town the right to direct Contractor as to details of doing work or to exercise a measure of control over the work mean that Contractor shall follow the direction of the Town as to end results of the work only. This Contract shall not, in any way, be construed to create a partnership or any other kind of joint undertaking or venture between the parties hereto. The Town will not pay a salary or hourly rate, instead of a fixed or contract rate. The Town will not withhold Social Security, Medicare, State or Federal taxes. Earnings in excess of \$600.00 per year will be recorded on IRS Form 1099-MISC and reported to the IRS.

AS AN INDEPENDENT CONTRACTOR, CONTRACTOR IS NOT ENTITLED TO WORKERS' COMPENSATION BENEFITS EXCEPT AS MAY BE PROVIDED BY THE INDEPENDENT CONTRACTOR NOR TO UNEMPLOYMENT INSURANCE BENEFITS UNLESS UNEMPLOYMENT COMPENSATION COVERAGE IS PROVIDED BY THE INDEPENDENT CONTRACTOR OR SOME OTHER ENTITY. THE CONTRACTOR IS OBLIGATED TO PAY ALL FEDERAL AND STATE INCOME TAX ON ANY MONEYS EARNED OR PAID PURSUANT TO THIS CONTRACT.

11.0 ASSIGNMENT

Contractor shall not assign or delegate this Agreement or any portion thereof, or any monies due to or become due hereunder without the Town's prior written consent.

12.0 DEFAULT

Each and every term and condition hereof shall be deemed to be a material element of this Agreement. In the event either party should fail or refuse to perform according to the terms of this Agreement, such party may be declared in default.

13.0 TERMINATION

- a) This Agreement may be terminated by either party for material breach or default of this Agreement by the other party not caused by any action or omission of the other party by giving the other party written notice at least thirty (30) days in advance of the termination date. Termination pursuant to this subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

- b) In addition to the foregoing, this Agreement may be terminated by the Town for its convenience and without cause of any nature by giving written notice at least fifteen (15) days in advance of the termination date. In the event of such termination, the Contractor will be paid for the reasonable value of the services rendered to the date of termination, not to exceed a pro-rated daily rate, for the services rendered to the date of termination, and upon such payment, all obligations of the Town to the Contractor under this Agreement will cease. Termination pursuant to this Subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

14.0 INSPECTION AND AUDIT

The Town and its duly authorized representatives shall have access to any books, documents, papers, and records of the Contractor that are related to this Agreement for the purpose of making audits, examinations, excerpts, and transcriptions.

15.0 DOCUMENTS

All computer input and output, analyses, plans, documents photographic images, tests, maps, surveys, electronic files and written material of any kind generated in the performance of this Agreement or developed for the Town in performance of the Services are and shall remain the sole and exclusive property of the Town. All such materials shall be promptly provided to the Town upon request therefor and at the time of termination of this Agreement, without further charge or expense to the Town. Contractor shall not provide copies of any such material to any other party without the prior written consent of the Town.

16.0 ENFORCEMENT

In the event that suit is brought upon this Agreement to enforce its terms, the prevailing party shall be entitled to its reasonable attorneys' fees and related court costs. Colorado law shall apply to the construction and enforcement of this Agreement. The parties agree to the jurisdiction and venue of the courts of Adams County in connection with any dispute arising out of or in any matter connected with this Agreement.

17.0 COMPLIANCE WITH LAWS; WORK BY ILLEGAL ALIENS PROHIBITED

- 17.1 Contractor shall be solely responsible for compliance with all applicable federal, state, and local laws, including the ordinances, resolutions, rules, and regulations of the Town; for payment of all applicable taxes; and obtaining and keeping in force all applicable permits and approvals.
- 17.2 Exhibit B, the "Town of Bennett Public Services Contract Addendum-Prohibition Against Employing Illegal Aliens", is attached hereto and incorporated herein by reference. There is also attached hereto a copy of Contractor's Pre-Contract Certification which Contractor has executed and delivered to the Town prior to Contractor's execution of this Agreement.

18.0 INTEGRATION AND AMENDMENT

This Agreement represents the entire Agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties.

19.0 NOTICES

All notices required or permitted under this Agreement shall be in writing and shall be given by hand delivery, by United States first class mail, postage prepaid, registered or certified, return receipt requested,

by national overnight carrier, or by facsimile transmission, addressed to the party for whom it is intended at the following address:

If to the Town:

Town of Bennett
Attn: Town Administrator
207 Muegge Way
Bennett, CO 80102
Telephone: (303) 644-3249
Fax: (303) 644-4125

If to the Contractor:

__[Contractor name]_____
__[Contact person]_____
__[address]_____
__[city, state, zip]_____
Telephone: _____
Fax: _____

Any such notice or other communication shall be effective when received as indicated on the delivery receipt, if by hand delivery or overnight carrier; on the United States mail return receipt, if by United States mail; or on facsimile transmission receipt. Either party may by similar notice given, change the address to which future notices or other communications shall be sent.

In witness whereof, the parties have executed this Agreement to be effective as of the day and year of signed by the Town.

TOWN OF BENNETT
A Colorado Municipal Corporation

By: _____
Mayor

Attest: _____
Town Clerk

CONTRACTOR:

By: _____
Title: _____
Date: _____

Exhibit A – Scope of Services and Price Information

[See Following Page(s)]

Exhibit B

**Town of Bennett Public Services Contract Addendum
Prohibition Against Employing Illegal Aliens**

Prohibition Against Employing Illegal Aliens. Contractor shall not knowingly employ or contract with an illegal alien to perform work under this contract. Contractor shall not enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract.

Contractor will participate in either the E-verify program or the Department program, as defined in C.R.S. § 8-17.5-101(3.3) and 8-17.5-101(3.7), respectively, in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the public contract for services. Contractor is prohibited from using the E-verify program or the Department program procedures to undertake pre-employment screening of job applicants while this contract is being performed.

If Contractor obtains actual knowledge that a subcontractor performing work under this contract for services knowingly employs or contracts with an illegal alien, Contractor shall:

- a. Notify the subcontractor and the Town within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and
- b. Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to this paragraph the subcontractor does not stop employing or contracting with the illegal alien; except that the Contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

Contractor shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5).

If Contractor violates a provision of this Contract required pursuant to C.R.S. § 8-17.5-102, Town may terminate the contract for breach of contract. If the contract is so terminated, the Contractor shall be liable for actual and consequential damages to the Town.

**Pre-Contract Certification
in Compliance with C.R.S. Section 8-17.5-102(1)**

From: _____
(Prospective Contractor)

To: Town of Bennett

As a prospective independent contractor for the above-identified project, I (we) do hereby certify that, as of the date of this certification, the undersigned does not knowingly employ or contract with an illegal alien; and that the undersigned will participate in the E-Verify employment verification program administered jointly by the United States Department of Homeland Security and the Social Security Administration or the employment verification program of the Colorado Department of Labor and Employment Program, as defined in C.R.S. § 8-17.5-101(3.3) and 8-17.5-101(3.7), respectively, in order to confirm the employment eligibility of any employees hired since the date of this contract to perform work under this contract.

Executed this _____ day of _____, 20__.

Prospective Contractor _____

By: _____

Title: _____

State of Colorado

ACKNOWLEDGMENT

STATE OF _____)
) ss.

COUNTY OF _____)

The foregoing Certification was acknowledged before me this ____ day of _____, 20__, by [Name] _____, for [Company Name] _____.

Witness my hand and official seal.

My commission expires: _____

(SEAL)

Notary Public

TOWN of BENNETT CONSTRUCTION PLANS

BRPS LOWER POND FISHING IMPROVEMENTS

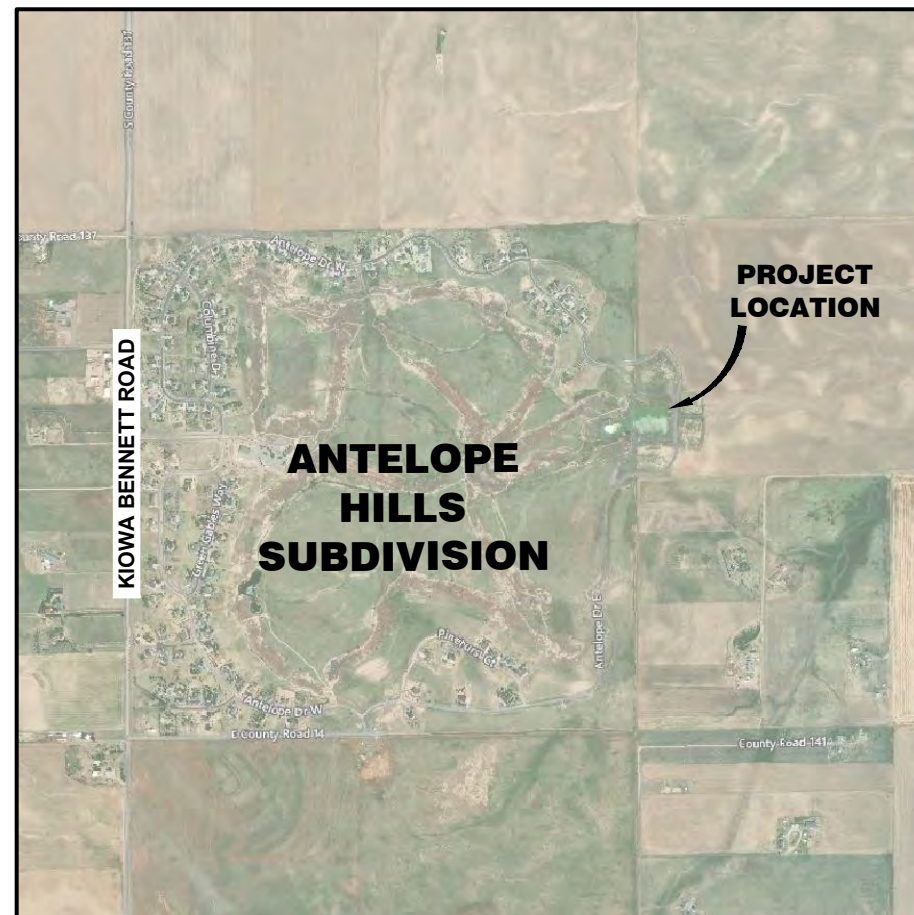
BENNETT, COLORADO

JANUARY, 2022

PROJECT OWNER: Town of Bennett
207 Muegge Way
Bennett, CO 80102

CIVIL ENGINEER: Terramax, Inc.
4220 Golf Vista Drive
Loveland, Colorado 80537
(303) 929-3194

VICINITY MAP
SCALE 1" = 2,000'



2,000 1,000 0 2,000
SCALE IN FEET



Sheet List Table	
No.	Sheet Title
1	COVER SHEET
2	GENERAL NOTES AND SPECIFICATIONS
3	EXISTING SITE PLAN
4	RIGHT-OF-WAY EXHIBIT
5	PROPOSED SITE PLAN
6	PROPOSED GRADING PLAN
7	TRAIL DETAILS
8	POND DETAILS
9	EROSION CONTROL PLAN
10	EROSION CONTROL DETAILS 1
11	EROSION CONTROL DETAILS 2
12	ENTRY ROAD PLAN AND PROFILE
13	ENTRY ROAD DETAILS
14	POND PLAN AND PROFILE



TERRAMAX, INC.
CONSULTING ♦ ENGINEERING

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

**TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
COVER SHEET**

Project No. 728

Date 13/JAN/22

By LD

Scale As Noted

Sheet Page 19

1

14

Plot Date: 01/13/22-11:56am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPS\Fishing Pond\Plan Set\Drawing Name\Fishing Pond Cover Sheet.dwg

GENERAL NOTES:

1. SPECIFICATIONS. THE PROJECT SPECIFICATIONS SHALL BE THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, LATEST REVISIONS, LATEST SPECIAL PROVISIONS, AND INCLUDING DIVISION 100, GENERAL PROVISIONS. THE STANDARD SPECIFICATIONS ARE AVAILABLE DIRECTLY FROM CDOT.
2. QUALITY ASSURANCE (QA) / QUALITY CONTROL (QC): FOR QA-QC PER THE SPECIFICATIONS, THE SELECTED CONTRACTOR IS REQUIRED TO PROVIDE QUALITY CONTROL FOR THE PROJECT, AND THE LOCAL AGENCY (TOWN OF BENNETT, PROJECT OWNER) IS REQUIRED TO PROVIDE QUALITY ASSURANCE.
3. RIGHT-OF-WAY LIMITS. PROJECT PROPERTY AND ROAD RIGHTS-OF-WAY AS SHOWN ON THESE PLANS ARE UNDER THE OWNERSHIP AND CONTROL OF THE TOWN OF BENNETT. EXISTING FENCE IS NOT TO BE DISTURBED BY THIS PROJECT WORK. ANY DISTURBANCE OR DAMAGE TO EXISTING FENCING ADJACENT TO THE PROJECT BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AT HIS SOLE EXPENSE. PROJECT WORK AND ACTIVITIES ARE NOT ALLOWED OUTSIDE KNOWN TOWN OF BENNETT PROPERTY OR RIGHT-OF-WAY CONTROLLED AREAS, AS SHOWN ON THESE PLANS.
4. CONSTRUCTION EASEMENT. THE TOWN OF BENNETT HAS NOT OBTAINED ADDITIONAL CONSTRUCTION EASEMENT FOR THIS PROJECT WORK, TEMPORARY OR PERMANENT. THE CONTRACTOR SHALL CONFINE ALL PROJECT WORK AND RELATED ACTIVITIES TO THE TOWN OF BENNETT PROPERTY AND RIGHT-OF-WAY UNLESS THE CONTRACTOR MAKES HIS OWN ARRANGEMENTS DIRECTLY WITH AFFECTED ADJACENT PROPERTY OWNERS. IN SUCH CASE, THE CONTRACTOR SHALL PROVIDE THE TOWN OF BENNETT WRITTEN, SIGNED COPIES OF ANY AGREED CONSTRUCTION AGREEMENT ARRANGEMENT.
5. CONTROL OF WORK AREA. THE PROJECT WORK AREA SHALL BE UNDER THE CONTRACTOR'S CONTROL FOR THE DURATION OF THE PROJECT THROUGH SUBSTANTIAL COMPLETION. DURING THAT TIME, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ACTIVITIES AND WORK WITHIN THIS AREA, INCLUDING CONSTRUCTION MEANS AND METHODS, ACCESS, SAFETY, SECURITY, SOIL DISTURBANCE, PROTECTION OF UTILITIES AND IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT WORK AREA COMPLIANCE WITH ALL FEDERAL AND STATE LAWS, CODES, PERMITS AND REQUIREMENTS. THE CONTRACTOR SHALL GRANT ACCESS FOR REVIEW, OBSERVATION AND INSPECTION OF THE SITE AND WORK TO THE TOWN OF BENNETT AS WELL AS OTHER AGENCIES HAVING RIGHTFUL JURISDICTION.
6. INDEMNIFICATION. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE TOWN OF BENNETT AND TERRAMAX, INC. THE PROJECT ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE TOWN OF BENNETT OR THE PROJECT ENGINEER.
7. PERMITS. THE CONTRACTOR SHALL SECURE THE NECESSARY PERMITS AND CLEARANCES REQUIRED TO PERFORM THE REQUIRED CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE PERMITS IN HIS POSSESSION AND IN GOOD STANDING THROUGHOUT THE ENTIRE PROJECT DURATION. ONE COPY OF EACH REQUIRED PERMIT SHALL BE KEPT ON THE PROJECT SITE DURING ALL PROJECT WORK. AT THIS TIME, THE PERMITS ARE KNOWN TO INCLUDE A STORMWATER DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH & ENVIRONMENT (CDPH&E). THE CONTRACTOR WILL NEED APPROPRIATE AIR POLLUTANT EMISSION NOTICE (APEN) DOCUMENTATION FOR EQUIPMENT USED ON THE PROJECT. ALL COSTS ASSOCIATED WITH THE STORMWATER DISCHARGE PERMIT SHALL BE BORNE BY THE CONTRACTOR, INCLUDING APPLICATION FEES AND EXPENSES.
8. BEST MANAGEMENT PRACTICES. THE CONTRACTOR SHALL AT A MINIMUM PROVIDE THE TOWN OF BENNETT A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN PORTION OF THE STORMWATER MANAGEMENT PLAN (SWMP) REQUIRED BY THE CDPH&E FOR THE STORMWATER DISCHARGE PERMIT, INCLUDING PLANNED BEST MANAGEMENT PRACTICES FOR THE PROJECT.
9. PROJECT IMPACTS. REGARDLESS OF CDPH&E STORMWATER DISCHARGE PERMIT, APEN AND FUGITIVE DUST CONTROL REQUIREMENTS, AND SWMP PROVISIONS, THE TOWN OF BENNETT RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR AT HIS SOLE EXPENSE TO UNDERTAKE ADDITIONAL MEASURES AS NEEDED TO APPROPRIATELY ADDRESS MUD, DUST, FLOODING, EROSION, SEDIMENT CONTROL AND OTHER ENVIRONMENTAL AND PROJECT DISTURBANCE ISSUES AT THE SITE TO PROTECT ITS PROPERTY, RESIDENTS, OPERATIONS AND INFRASTRUCTURE.

10. APPROVED PLANS. CONTRACTOR SHALL WORK FROM AN APPROVED CONSTRUCTION PLAN SET, ISSUED "FOR CONSTRUCTION", SEALED, SIGNED, AND DATED BY THE PROJECT ENGINEER OF RECORD, DANIEL P. GIROUX, P.E. CONTRACTOR SHALL MAINTAIN AT LEAST ONE SET OF THE SIGNED, APPROVED PLANS ON-SITE AT ALL TIMES THROUGHOUT THE PROJECT EXECUTION.
11. NOTIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE TOWN OF BENNETT, A MINIMUM OF THREE FULL BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF PROJECT WORK ON SITE, AND A MINIMUM OF TWO FULL BUSINESS DAYS PRIOR TO REQUIRED TESTING OR INSPECTIONS. THE CONTRACTOR SHALL PROVIDE THE TOWN OF BENNETT A MINIMUM OF THREE BUSINESS DAYS' NOTICE FOR ANY UTILITY OUTAGES.
12. SCALPING AND TOPSOIL. IN CURRENTLY VEGETATED PROJECT AREAS, THE CONTRACTOR SHALL STRIP A MINIMUM 6" DEPTH OF EXISTING SURFACE SOIL MATERIALS THROUGHOUT THE TRAIL FILL LIMIT (FOOTPRINT) AREA, AND STOCKPILE THOSE MATERIALS FOR FINAL REDISTRIBUTION AS TOPSOIL. THE GRASS AND GRASS ROOTS ORGANICS ARE ACCEPTABLE AND DESIRABLE TO REMAIN IN THE STRIPPED MATERIALS FOR TOPSOIL REDISTRIBUTION. NONE OF THESE MATERIALS MAY BE USED FOR FILL MATERIAL. THESE STRIPPED MATERIALS DO NOT NEED TO BE REMOVED FROM THE PROJECT SITE.
13. PLANTING. ALL DISTURBED PROJECT AREAS NOT PLANNED FOR ROAD, PARKING, SHELTER, ARMORING OR TRAIL SHALL BE MULCHED AND SEEDED IN ACCORDANCE WITH THE SPECIFIED PROJECT SEED MIX. THE CONTRACTOR IS RESPONSIBLE FOR WATERING THROUGH PROJECT CLOSE-OUT AND ACCEPTANCE. FOR PROJECT REVEGETATION, THE CONTRACTOR SHALL PERFORM THE FOLLOWING:

-USE SHARP BROTHERS COMPANY "LOW GROW MIX" OR EQUIVALENT AT 90 POUNDS LIVE SEED PER ACRE (PLS/ACRE), CERTIFIED WEED-FREE, IN THE FOLLOWING SEED PROPORTIONS:

30%CRESTED WHEATGRASS, EPHRIAM

25%PERENNIAL RYEGRASS, VNS

20%SHEEP FESCUE, VNS

15%CHEWING FESCUE, JAMESTOWN OF BENNETT IV

10%CANADA BLUEGRASS, RUEBENS

-THE SEED SHALL BE DRILLED, NOT BROADCAST, THEN A HYDROMULCH SHALL BE APPLIED AFTERWARDS.

-THIS REVEGETATION APPROACH SHALL BE PERFORMED FOR ALL AREAS DISTURBED BY THE PROJECT AND RELATED ACTIVITIES, UNLESS OTHERWISE NOTED OR APPROVED BY THE TOWN OF BENNETT.

-GRASSED PROJECT STORAGE AND STAGING AREAS DISTURBED FOR PROJECT USE THAT BECOME HARD-COMPACTED SHALL BE DISCED, HARROWED OR SIMILAR AS NECESSARY TO ENCOURAGE ROBUST REVEGETATION.
14. DEBRIS AND WASTE MATERIALS. ALL DEBRIS AND WASTE MATERIALS CREATED BY THE PROJECT WORK SHALL BE THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR, TO BE REMOVED FROM THE PROJECT SITE AND APPROPRIATELY AND LEGALLY DISPOSED OF, AT THE CONTRACTOR'S SOLE EXPENSE.
15. PROJECT SITE APPEARANCE AND CONDITION. GENERAL CLEANUP OF THE PROJECT AREA SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. WHEN STREET-CLEANING IS REQUIRED, THE ENTIRE WIDTH OF THE ROAD SHALL BE CLEANED.
16. PROJECT SITE RESTORATION. ALL PAVEMENTS, UTILITIES, FENCING, LANDSCAPING AND OTHER STRUCTURES OR SURFACES AFFECTED BY THE PROJECT CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN BEFORE COMMENCEMENT OF THE WORK, TO THE SATISFACTION OF THE TOWN OF BENNETT.
17. UTILITY LOCATES. THESE DRAWINGS DO NOT PURPORT TO PROVIDE A COMPLETE RECORD OF ALL EXISTING UTILITY LOCATIONS ON THE PROJECT SITE. THE CONTRACTOR SHALL FIELD-VERIFY ALL UTILITY LOCATIONS IN THE FIELD, INCLUDING THROUGH TIMELY NOTIFICATION TO THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC OR "ONE-CALL"), AMONGST OTHER MEASURES, BEFORE COMMENCING PROJECT WORK.

TOWN OF BENNETT

BRPS LOWER POND

FISHING IMPROVEMENTS

GENERAL NOTES AND SPECIFICATIONS

Project No.	728
Date	13/JAN/22
By	LD
Scale	N/A
Sheet	Page 19
2	14

TERRAMAX, INC.

CONSULTING ♦ ENGINEERING

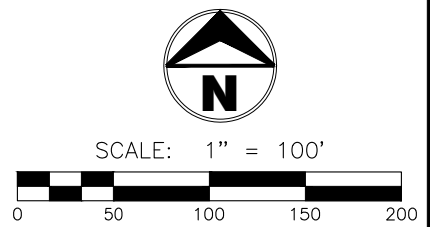
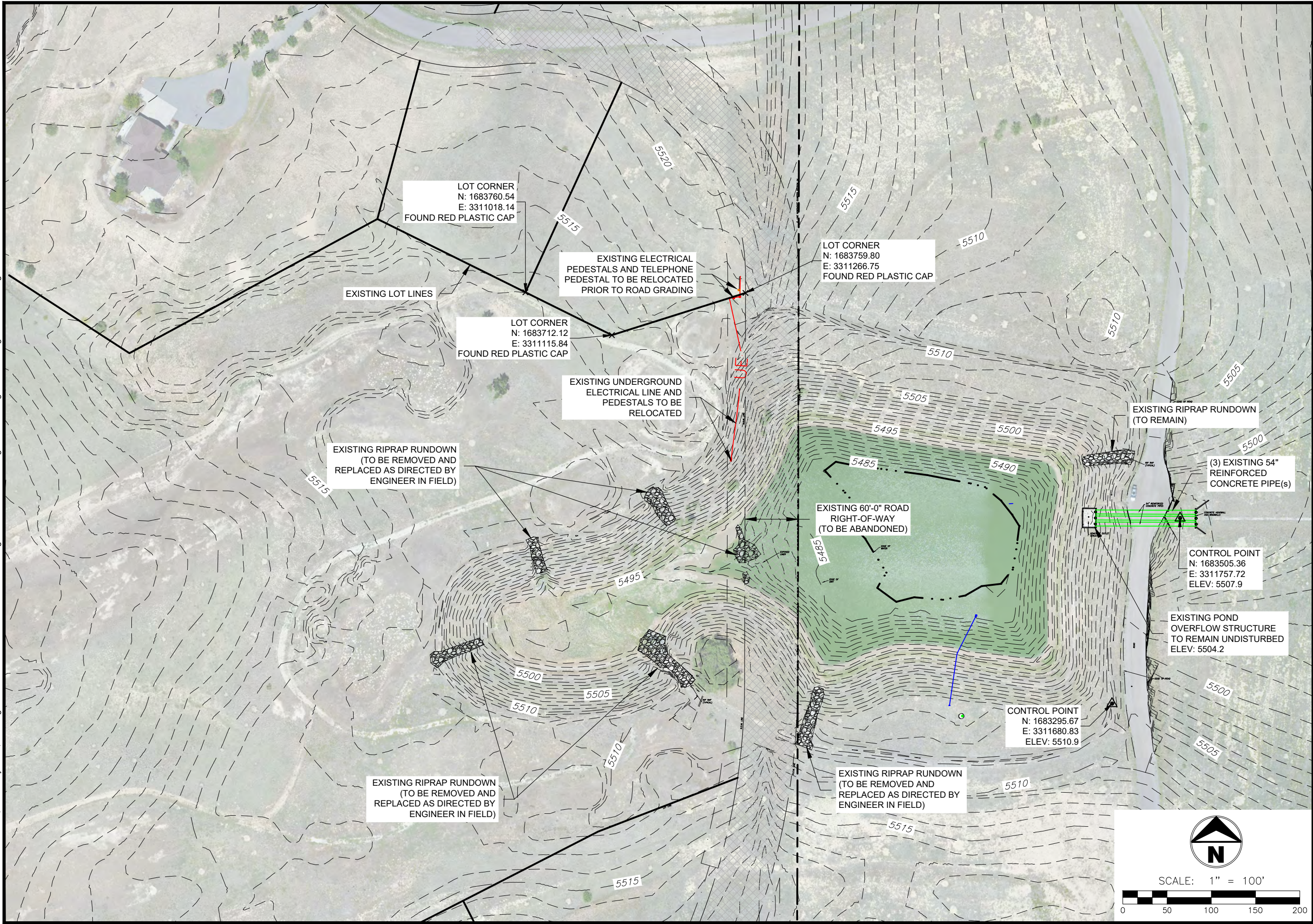
4220 GOLF VISTA DRIVE

LOVELAND, COLORADO 80537

DANGIROUX@TERRAMAX.US

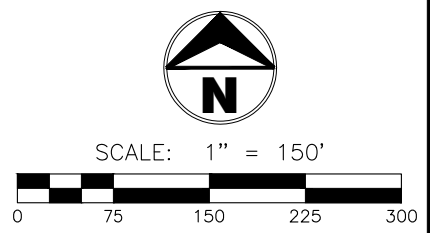
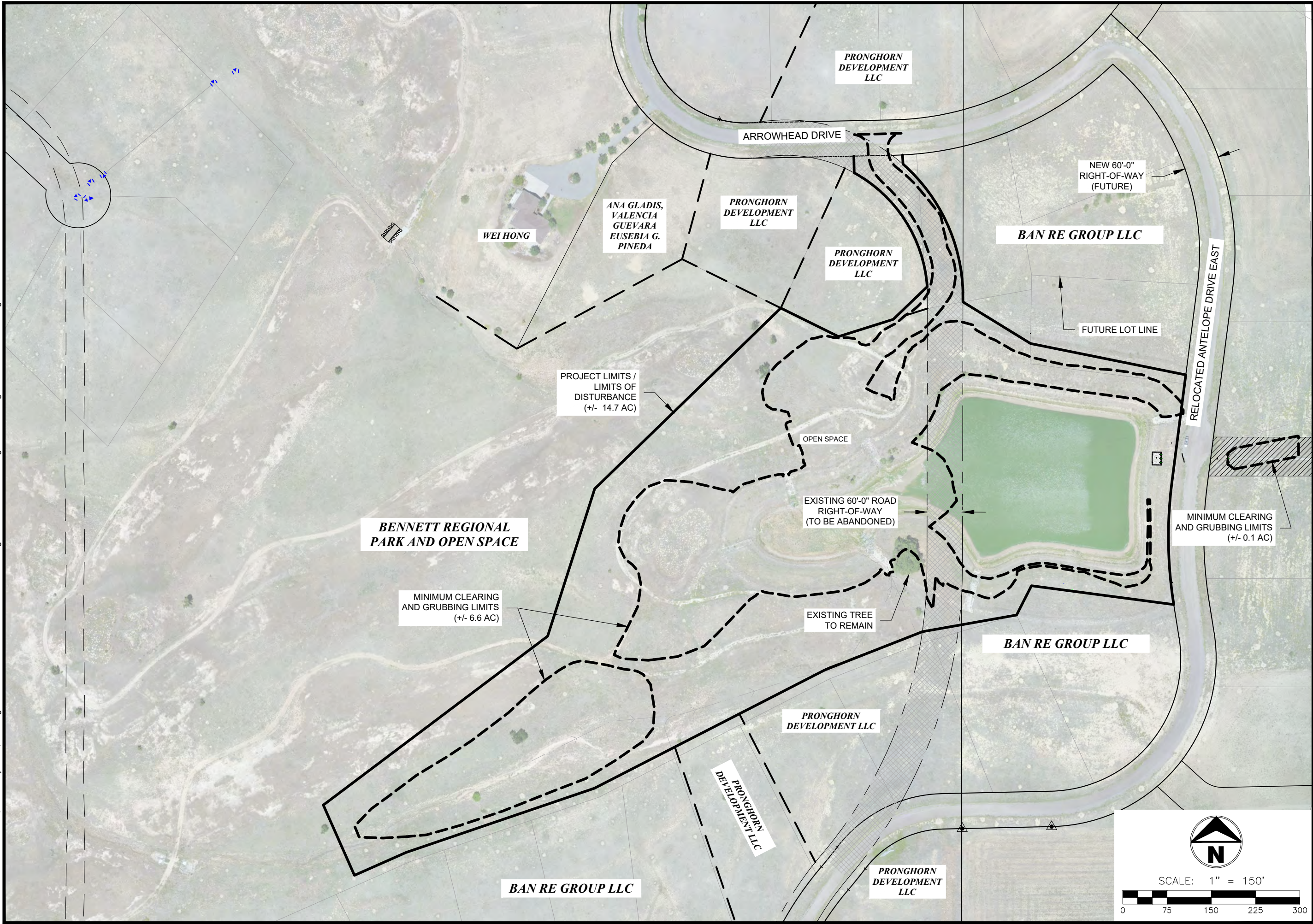
(303) 929-3194

Plot Date: 01/13/22-11:57am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond Existing Site exhibit.dwg



**TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
EXISTING SITE PLAN**

Plot Date: 01/13/22-11:57am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond ROW exhibit.dwg



**TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
RIGHT-OF-WAY EXHIBIT**

ARROWHEAD DRIVE

APPROXIMATE LOCATION 24'x24' SQUARE RCP STEEL SHELTER INCLUDING FOUNDATION AND FULL SLAB-ON-GRADE BELOW, DESIGN-BUILD WITH P.E. STAMP, BENNETT SNOW & WIND LOADING PER IBC 2018

SHELTER LAYOUT, BIKE PARKING, PAVERS, AND RETAINING WALLS SHOWN FOR REFERENCE ONLY

RELOCATED ELECTRICAL AND TELEPHONE PEDESTALS

LANDSCAPE BERMS SHOWN FOR REFERENCE ONLY FINAL SIZE AND LAYOUT TO BE DETERMINE IN THE FIELD AS DIRECTED BY THE ENGINEER

APPROXIMATE LOCATION 16'x16' SQUARE RCP STEEL SHELTER INCLUDING FOUNDATION AND FULL SLAB-ON-GRADE BELOW, DESIGN-BUILD WITH P.E. STAMP, BENNETT SNOW & WIND LOADING PER IBC 2018

NEW 6FT WIDE PARKING LOT ACCESS (~150 L.F.)

18ft WIDE MAINTENANCE ACCESS (~90 L.F.)

NEW 6FT WIDE TRAIL CONNECTION (~190 L.F.)

EXISTING TRAIL (TO REMAIN)

(2) 24" DIA. CULVERT(s)

GRADING TO BE ADJUSTED IN THE FIELD AS NECESSARY TO AVOID EXISTING TRAIL

20'x50 RIPRAP OUTFALL (SEE DETAIL, SHT 8)

20'x50 RIPRAP OUTFALL (SEE DETAIL, SHT 8)

(2) 24" DIA. CULVERT(s)

EXISTING TRAIL (TO REMAIN)

EXISTING TRAIL TO BE REMOVED AND REPLACED AS NECESSARY FOR PLACEMENT OF CULVERTS

UDFCD TYPE WATER QUALITY OUTLET CONTROL (SEE DETAIL, SHT XX)

WATER QUALITY POND

21 PARKING SPACES

NEW 8FT WIDE POND ACCESS TRAIL (~200 L.F.)

FISHING POND WEST OVERFLOW AREA MAX. INUNDATION DEPTH 6.44 FEET

DETENTION POND

INSTALL NEW 7,000 SF POND LINER INCLUDING SPLICE TO EXISTING POND LINER AND UPPER ANCHORING

NEW 4FT WIDE POND PERIMETER TRAIL (~500 L.F.) SEE DETAIL, SHT 7

SHORELINE FISHING WITH BOULDER EDGE (SEE NOTE)

FUTURE POND ACCESS TRAIL

NEW 60'-0" RIGHT-OF-WAY (FUTURE)

RELOCATED ANTELOPE DRIVE EAST

35' WIDE x 120' LONG x 4' DEEP PLUNGE POOL

OVERFLOW SPILLWAY ELEV: 5504.20

EXTEND RIPRAP 10'-0" (MIN.) PAST TOE OF SLOPE

FISHING POND AREA N.W.S. ELEV: 5501.60

150 L.F. PERMATRAK PRE-CAST ELEVATED WALKWAY INCLUDING SUPPORT BEAMS, RAILING AND FOUNDATION, 8 FT CLEAR WIDTH 100 PSF PEDESTRIAN LOADING

NEW 4FT WIDE POND PERIMETER TRAIL (~150 L.F.) SEE DETAIL, SHT

EXISTING 60'-0" ROAD RIGHT-OF-WAY (TO BE ABANDONED)

FUTURE POND ACCESS TRAIL

SHORELINE FISHING WITH BOULDER EDGE (SEE NOTE)

NOTES:

- SHORELINE FISHING WITH BOULDER EDGES TO BE PLACED AS DIRECTED BY ENGINEER IN FIELD

SCALE: 1" = 120'

TOWN OF BENNETT BRPS LOWER POND FISHING IMPROVEMENTS PROPOSED SITE PLAN

Project No.	728
Date	13/JAN/22
By	LD
Scale	1" = 120'
Sheet	5

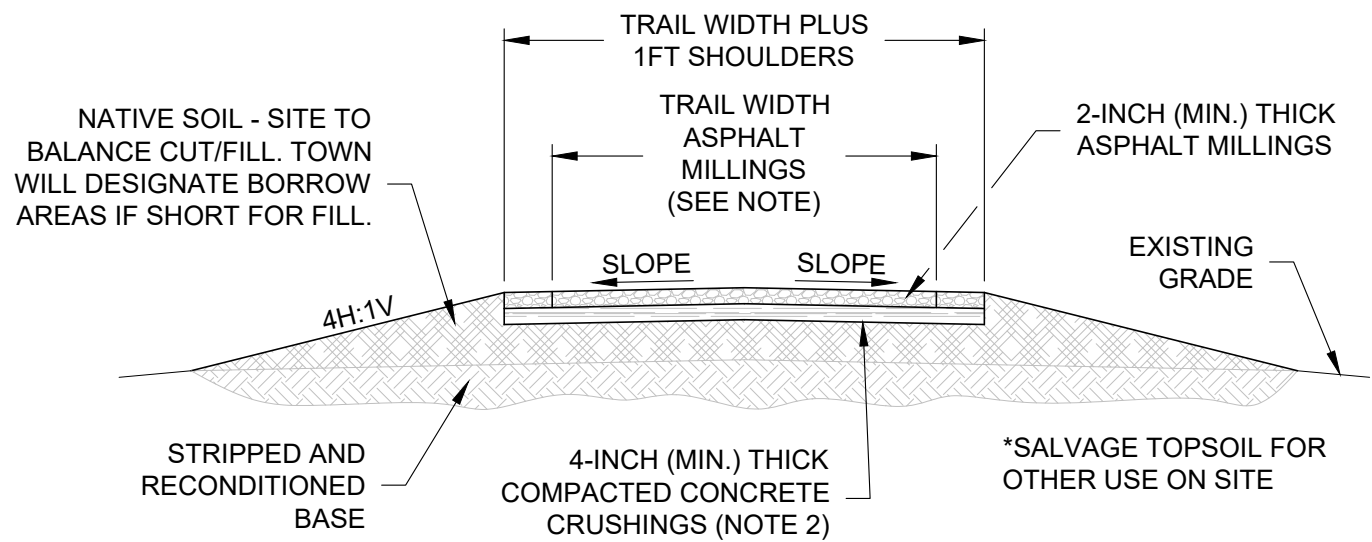
Page 190

14

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

Project No.	728
Date	13/JAN/22
By	LD
Scale	1" = 120'
Sheet	Page 19
6	14

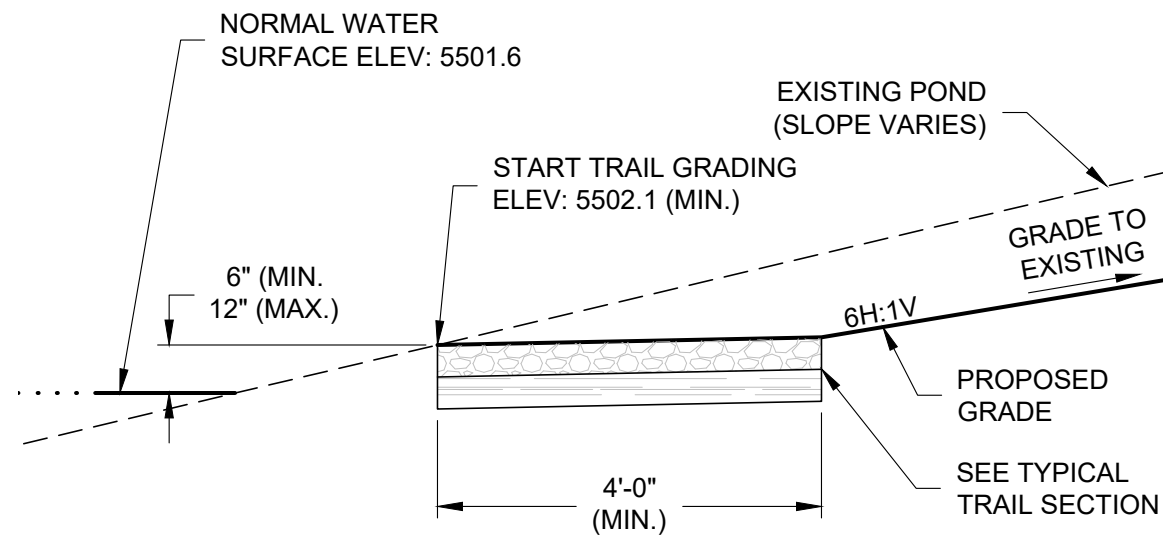
Plot Date: 01/13/22-11:58am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond Details exhibit.dwg



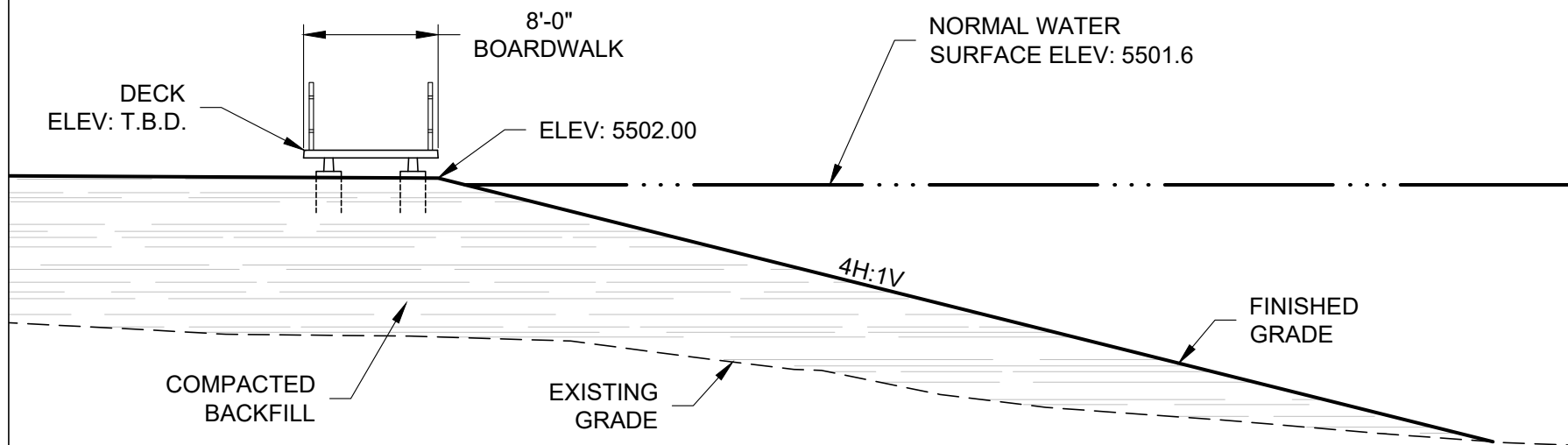
NOTES:

1. TRAIL WIDTH VARIES BY LOCATION, SEE PLANS FOR DIMENSIONS.
2. CONCRETE CRUSHINGS CURRENTLY STOCKPILED AT TOWN PROPERTY 4TH & TRUMAN, PROVIDED BY TOWN FOR USE, BUT WITH ALL LOAD, HAUL, UNLOAD, PLACEMENT, AND COMPACTION BY CONTRACTOR
3. ASPHALT MILLINGS TO BE PROVIDED BY CONTRACTOR

TYPICAL ACCESS TRAIL
SCALE 1" = 2'



TYPICAL POND PERIMETER TRAIL
SCALE 1" = 2'



TYPICAL BOARDWALK SECTION
SCALE 1" = 2'

TERRAMAX, INC.

CONSULTING ♦ ENGINEERING

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

**TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
TRAIL DETAILS**

Project No. 728

Date 13/JAN/22

By LD

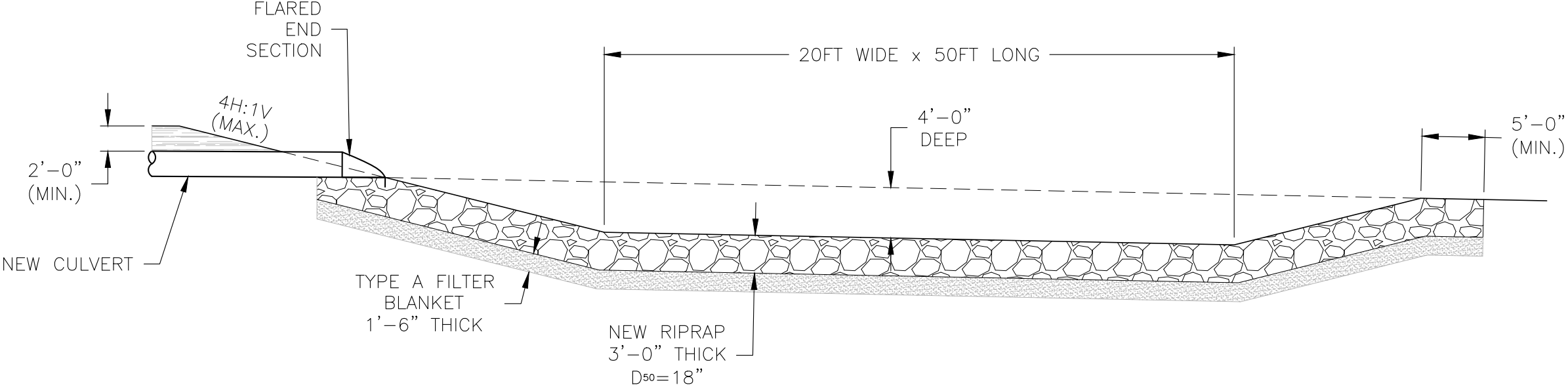
Scale 1"=100'H/10'V

Sheet Page 198

7

14

Plot Date: 01/13/22-11:58am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond Details exhibit.dwg



TYPICAL RIPRAP OUTFALL
SCALE 1" = 10'

TERRAMAX, INC.

CONSULTING ♦ ENGINEERING

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

**TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
POND DETAILS**

Project No.	728
Date	13/JAN/22
By	LD
Scale	1"=100'H/10'V
Sheet	Page 198
8	14

Plot Date: 01/13/22-11:59am, Plotted by: mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond Set\Drawing Name: Fishing Pond Erosion Control exhibit.dwg

LEGEND:

- SP

STOCKPILE MANAGEMENT
- SF

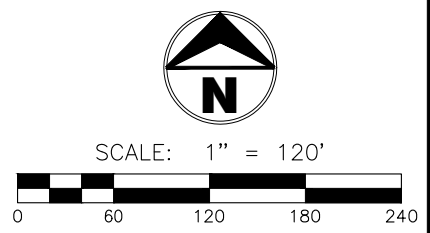
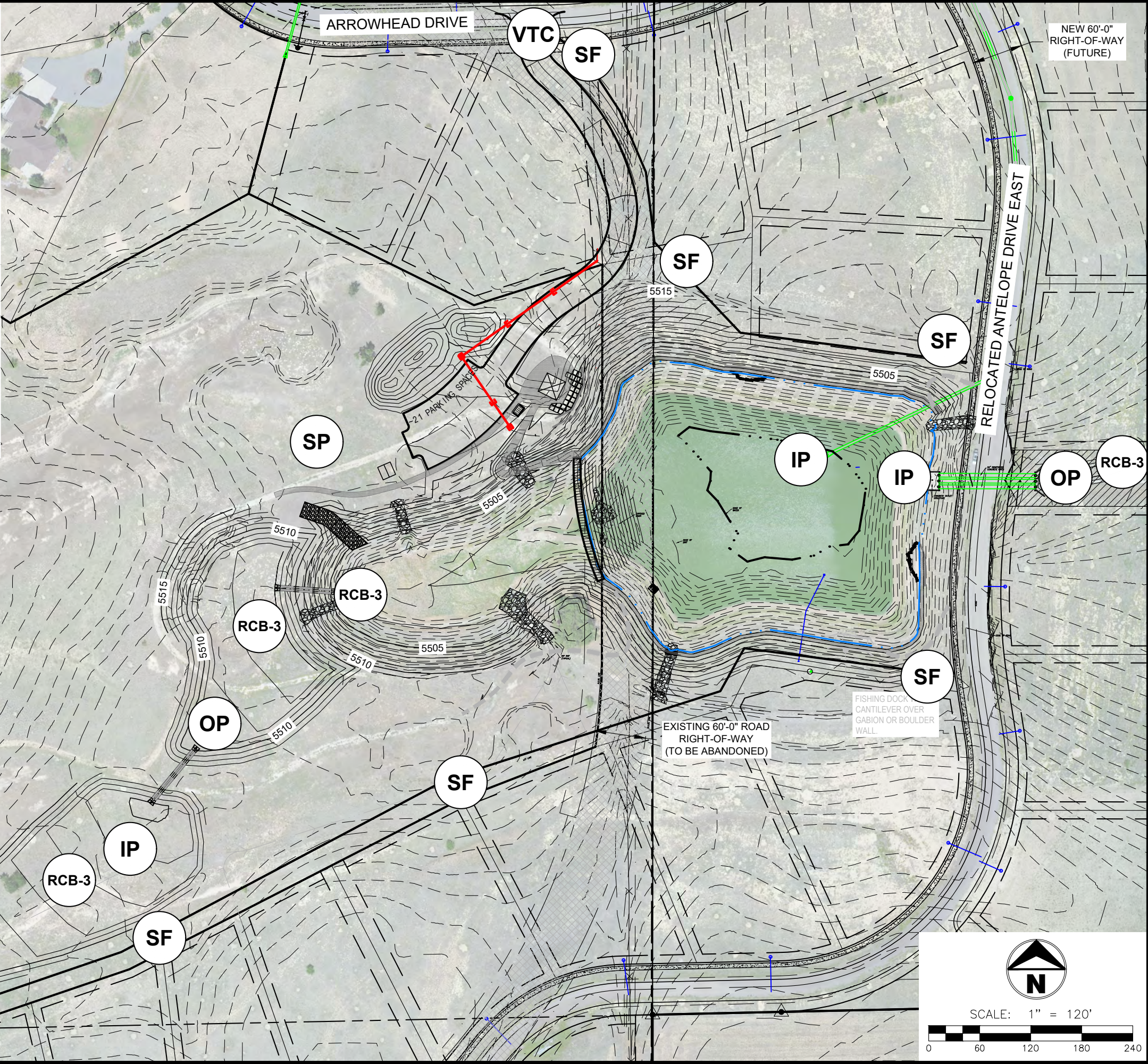
SILT FENCE
- CWA

CONCRETE WASH AREA
- VTC

VEHICLE TRACKING CONTROL
- CF

CONSTRUCTION FENCE
- RCB-3

ROLLED EROSION CONTROL PRODUCTS



TERRAMAX, INC.

CONSULTING ♦ ENGINEERING

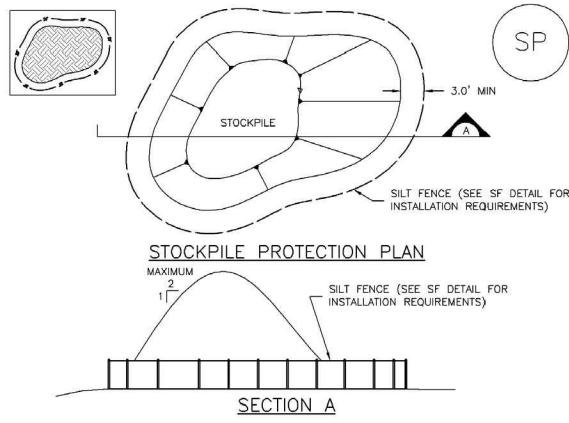
4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
EROSION CONTROL PLAN

Project No.	728
Date	13/JAN/22
By	LD
Scale	1" = 120'
Sheet	9
Page	20

Plot Date: 01/13/22-11:59am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond EC Details exhibit.dwg

Stockpile Management (SP) MM-2



SP-1. STOCKPILE PROTECTION

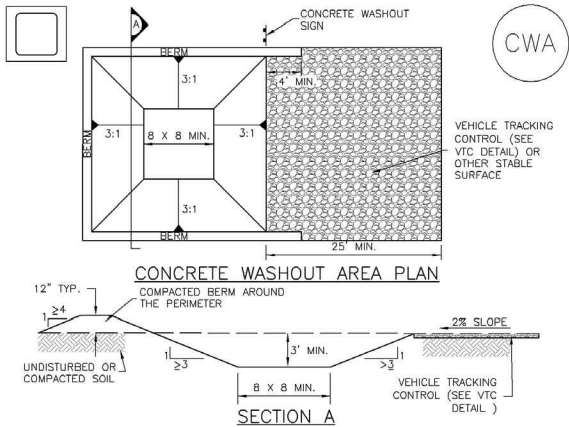
STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 - LOCATION OF STOCKPILES.
 - TYPE OF STOCKPILE PROTECTION.
2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SP-3

A EROSION CONTROL DETAIL
10 NOT TO SCALE

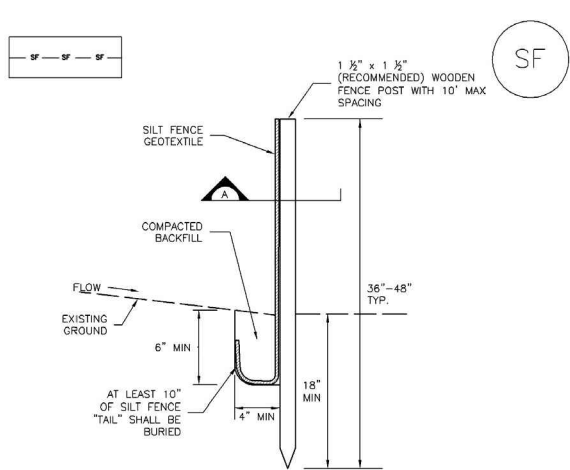
Concrete Washout Area (CWA) MM-1



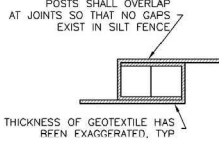
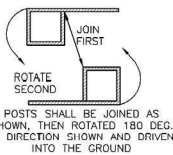
CWA-1. CONCRETE WASHOUT AREA

D EROSION CONTROL DETAIL
10 NOT TO SCALE

Silt Fence (SF) SC-1



SILT FENCE



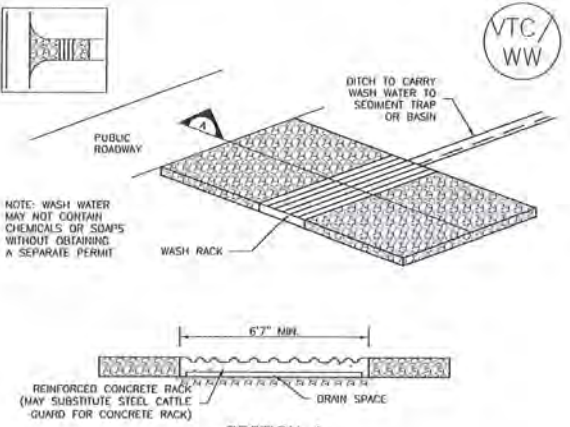
SECTION A

SF-1. SILT FENCE

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SF-3

B EROSION CONTROL DETAIL
10 NOT TO SCALE

SM-4 Vehicle Tracking Control (VTC) SM-4

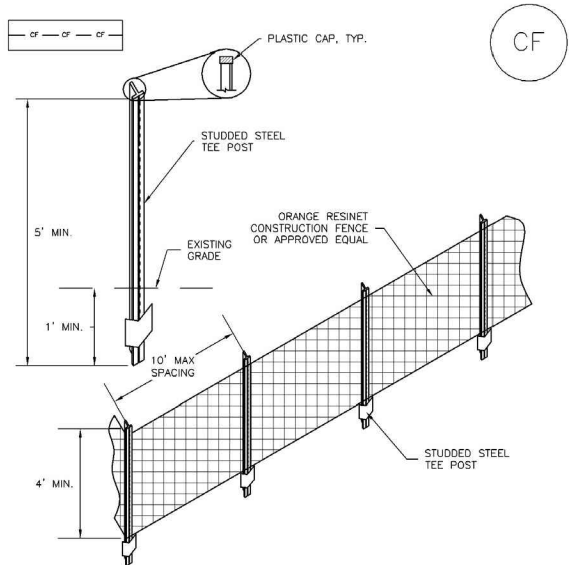


SECTION A

VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK

E EROSION CONTROL DETAIL
10 NOT TO SCALE

SM-3 Construction Fence (CF)



CF-1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 - LOCATION OF CONSTRUCTION FENCE.
2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR-GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.
4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.
5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CF-2 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

C EROSION CONTROL DETAIL
10 NOT TO SCALE

TERRAMAX, INC.
CONSULTING ENGINEERING

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
EROSION CONTROL DETAILS 1

Project No. 728

Date 13/JAN/22

By LD

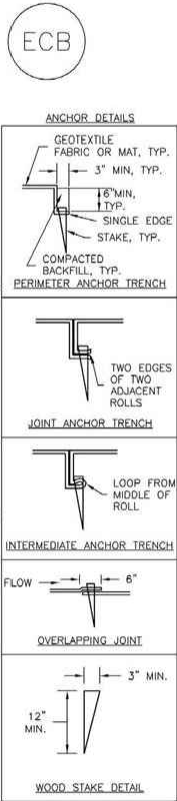
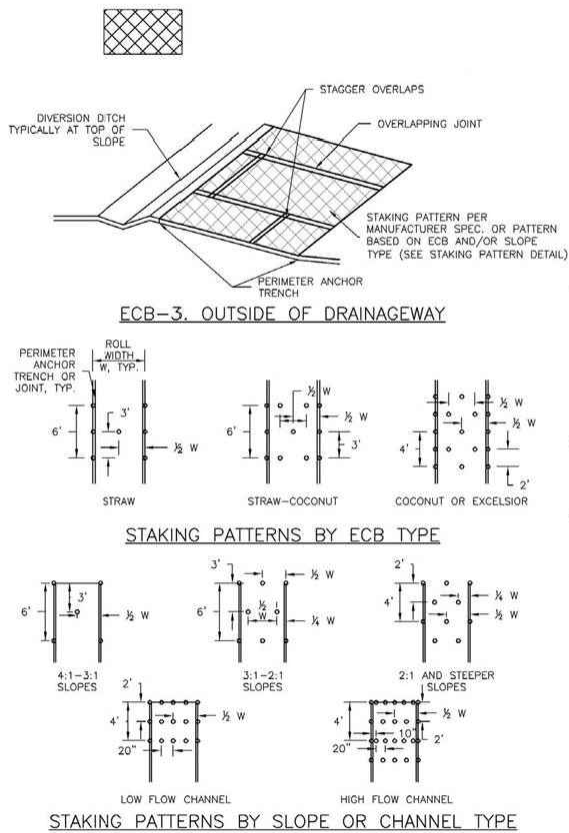
Scale As Noted

Sheet Page 20

10 14

Plot Date: 01/13/22-11:59am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond EC Details exhibit.dwg

EC-6 Rolled Erosion Control Products (RECP)



EROSION CONTROL BLANKET INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF ECB
 - TYPE OF ECB (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR).
 - AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.
- 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPs, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.
- IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
- PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.
- JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.
- INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.
- OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.
- MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1.
- ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBs SHALL BE RESEEDED AND MULCHED.
- DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

EROSION CONTROL BLANKET MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.
 - ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDPCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)

TABLE ECB-1. ECB MATERIAL SPECIFICATIONS				
TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	-	100%	-	DOUBLE/NATURAL
STRAW-COCONUT	30% MIN	70% MAX	-	DOUBLE/NATURAL
COCONUT	100%	-	-	DOUBLE/NATURAL
EXCELSIOR	-	-	100%	DOUBLE/NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL.

**ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS

A
13
EROSION CONTROL DETAIL
NOT TO SCALE

TERRAMAX, INC.
CONSULTING ♦ ENGINEERING

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
EROSION CONTROL DETAILS 2

Project No. 728

Date 13/JAN/22

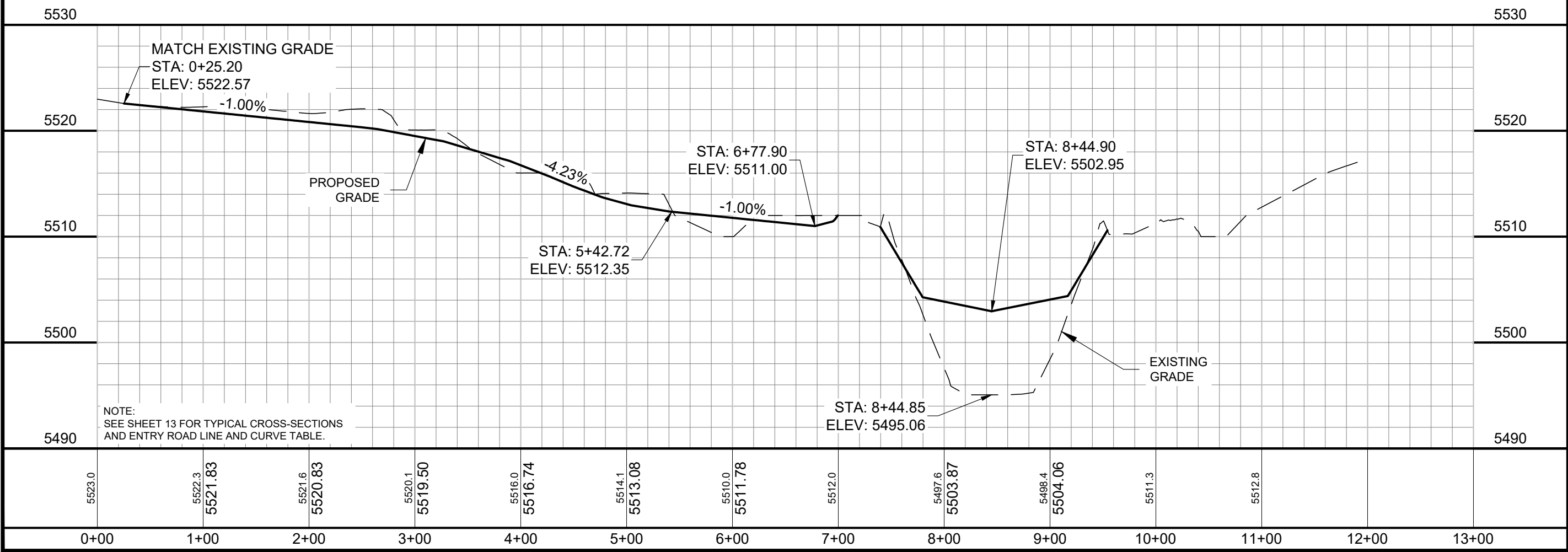
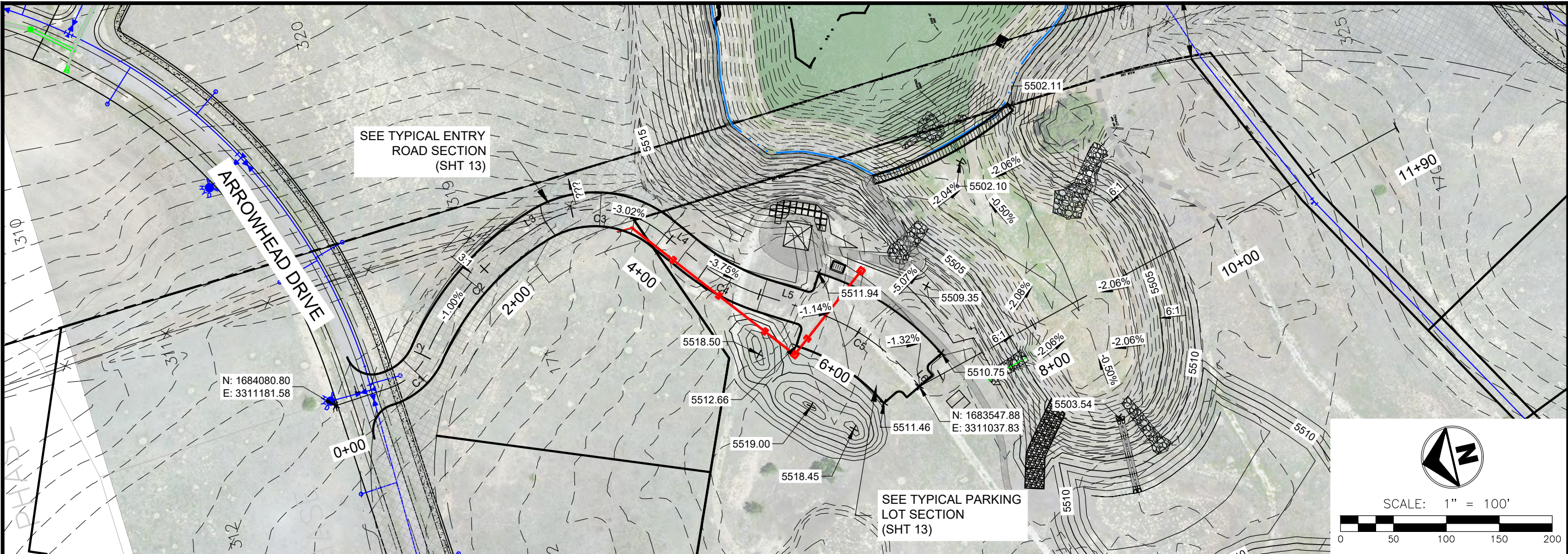
By LD

Scale As Noted

Sheet Page 20

11
14

Plot Date: 01/13/22-11:59am, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond Entry Rd PnP exhibit.dwg



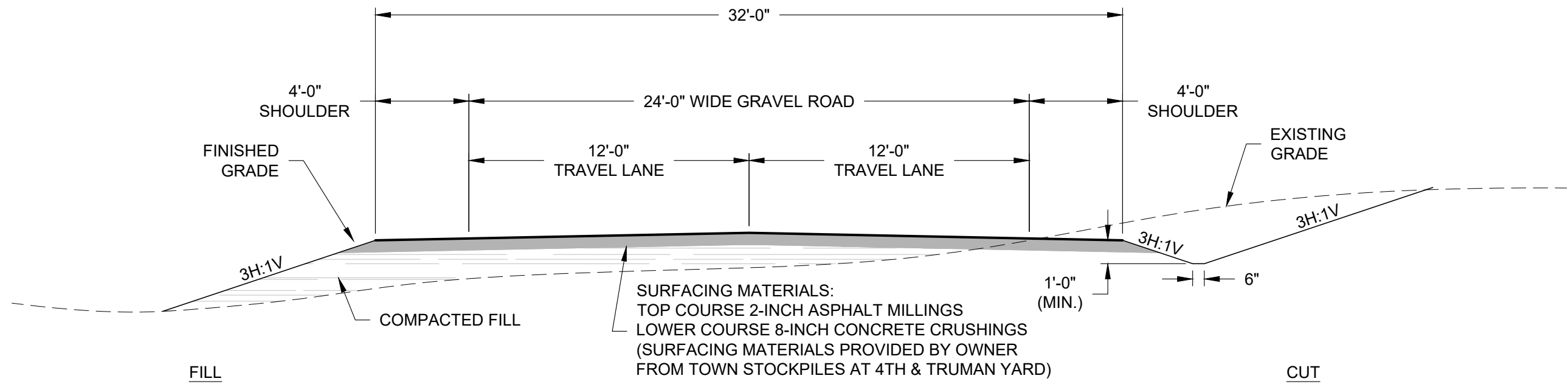
TERRAMAX, INC.
CONSULTING ♦ ENGINEERING

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

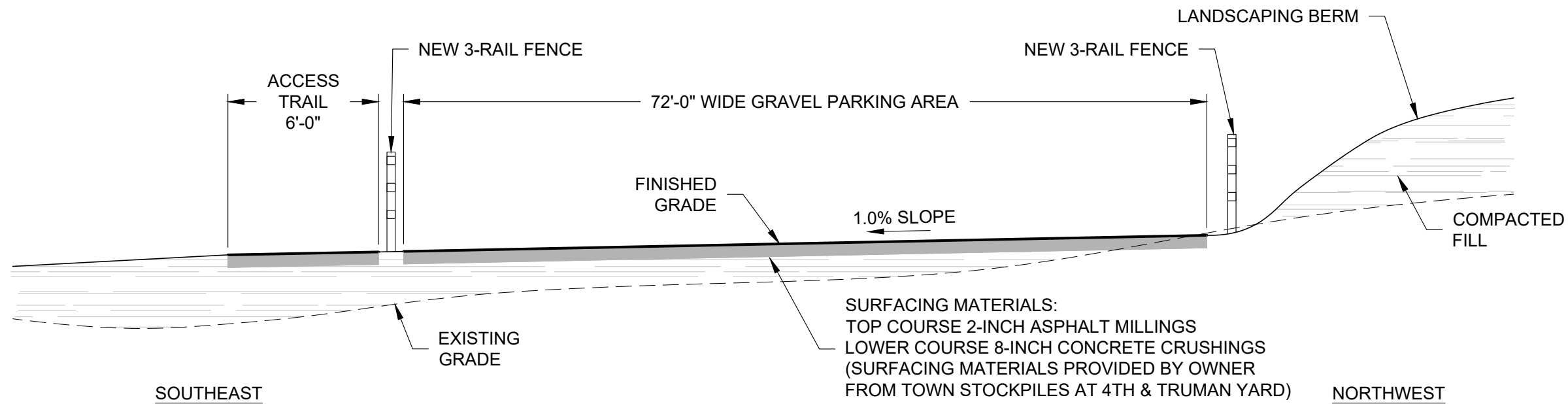
TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
ENTRY ROAD PLAN AND PROFILE

Project No. 728
Date 13/JAN/22
By LD
Scale 1"=100'H/10'V
Sheet 12 of 14

Plot Date: 01/13/22-12:00pm, Plotted by:mtkid, Drawing Path: N:\TerraMax\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond Details exhibit.dwg



TYPICAL ENTRY ROAD CROSS-SECTION
SCALE 1" = 5'

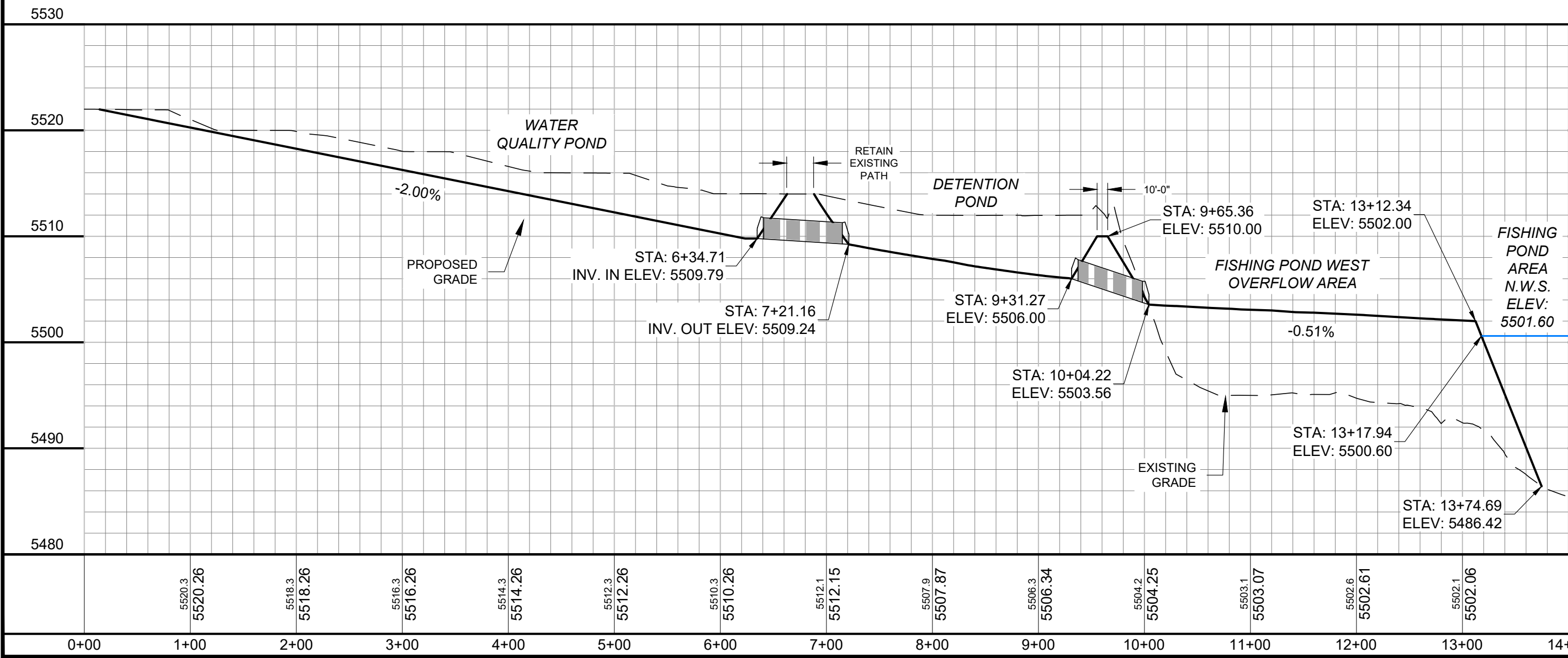
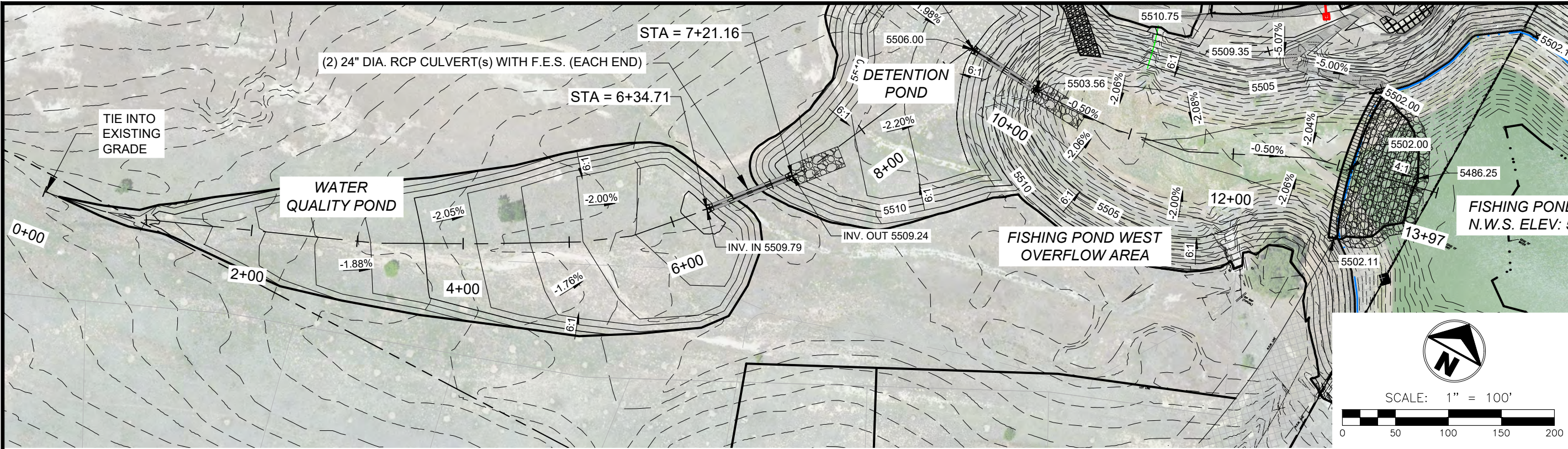


TYPICAL PARKING LOT CROSS-SECTION
SCALE 1" = 5'

Line Table			Curve Table					
Line #	Bearing	Length	Curve #	Radius	Length	Delta	Chrod Bearing	Chord Distance
L1	S1°12'00"E	52.60'						
L2	S48°59'15"E	1.93'	C1	61.00'	50.88'	47°47'15"	S25°05'37"E	49.42'
L3	S15°48'13"E	6.03'	C2	265.00'	153.48'	33°11'02"	S32°23'44"E	151.34'
L4	S55°41'33"W	39.66'	C3	100.00'	124.78'	71°29'45"	S19°56'40"W	116.84'
L5	S34°11'03"W	43.17'	C4	200.00'	75.08'	21°30'30"	S44°56'18"W	74.64'
L6	S66°14'44"W	10.09'	C5	214.80'	120.20'	32°03'42"	S50°12'53"W	118.64'

TOWN OF BENNETT
BRPS LOWER POND
FISHING IMPROVEMENTS
ENTRY ROAD DETAILS

Plot Date: 01/13/22-12:00pm, Plotted by:mtkid, Drawing Path: N:\TERRAMAX\Bennett\BRPOS\Fishing Pond\Plan Set\Drawing Name:Fishing Pond PnP exhibit.dwg



TERRAMAX, INC.

CONSULTING ♦ ENGINEERING

4220 GOLF VISTA DRIVE
LOVELAND, COLORADO 80537
DANGIROUX@TERRAMAX.US
(303) 929-3194

TOWN OF BENNETT

BRPS LOWER POND

FISHING IMPROVEMENTS

POND PLAN AND PROFILE

Project No. 728

Date 13/JAN/22

By LD

Scale 1"=100'H/10'V

Sheet 14

Page 20

REQUEST FOR PROPOSALS

Cover Sheet



welcome neighbors.

Date of RFP Issuance: 1/13/22
Project Number: 22-002
RFP Title: **Bennett Regional Park and Open Space Lower Pond Fishing Improvements**
Proposals Due: February 10, 2:00 p.m., Local Time
Submit Proposals to: **rprice@bennett.co.us**

Town Hall, 207 Muegge Way, Bennett, CO 80102-7806

For Additional Information Please Contact: Dan Giroux

(303) 644-3249 Ext. 1009

Email: dangiroux@terramax.us

Documents Included in This Package:

RFP Cover Sheet
Project Background and Specifications
RFP Instructions
Terms and Conditions
Special Terms and Conditions
Pricing Form
Submission Form
Substitute Form W-9
Sample Agreement

If any of the documents listed above are missing from this package, they may be requested via email or picked up at Town Hall, 207 Muegge Way, Bennett, Colorado.

The undersigned hereby affirms that (1) he/she is a duly authorized agent of the Proposer, (2) he/she has read all terms and conditions and technical specifications which were made available in conjunction with this RFP and fully understands and accepts them unless specific variations have been expressly listed in his/her offer, (3) the offer is being submitted on behalf of the Proposer in accordance with any terms and conditions set forth in this RFP, and (4) the Proposer will accept any awards made to it as a result of the offer submitted herein for a minimum of ninety calendar days following the date of submission.

PRINT OR TYPE YOUR INFORMATION

Name of Company: Kuhn Construction Inc. Fax: _____
Address: 42309 Kiowa Bennett Rd City/State: Kiowa, CO Zip: 80117
Contact Person: William Kuhn Title: President Phone: 303-570-6104
Authorized Representative's Signature: William Kuhn Phone: 303-570-6104
Printed Name: William Kuhn Title: President Date: 2-10-22
Email Address: kuhnconstruction@msn.com

SUBMISSION FORM

SUBMISSION: It is imperative, when submitting a bid/proposal, that you address the envelope as follows:

Town of Bennett
ATTN: Purchasing
207 Muegge Way
Bennett, CO 80102

Attn: Robin Price
Public Works Director
RFP: 22-002 BRPOS Lower Pond Fishing Improvements

Does your proposal comply with all the terms and conditions? If no, indicate exceptions YES / NO

Does your proposal meet or exceed all specifications? If no, indicate exceptions YES / NO

State percentage of prompt payment discount, if offered _____ %

State total bid price (include all items bid) \$785,574.00

State total bid price with discount _____

The Town of Bennett must have on file a completed W-9 prior to doing business with Contractors. Please submit the attached form with your Proposal.

Kuhn Construction Inc.

BRPOS Lower Pond Fishing Improvements

Contact Information:

Kuhn Construction Inc.
42309 Kiowa Bennett Rd, Kiowa, CO 80117
303-570-6104
kuhnconstruction@msn.com

William Kuhn- President
cell # 303-570-6104
kuhnconstruction@msn.com

History	<p>Kuhn Construction Inc. was started in 2010 as a grading, excavating, demo and utility company. Our office is located between Bennett and Kiowa on the Kiowa Bennett Road. We currently employ eight operators, experienced in all aspects of grading, drainage and utility projects. We own all of our equipment and have the resources to rent specialty equipment we might need. With our own equipment and a staff of experienced operators, we do a wide variety of projects. Our main focus of work is Parks, Trails, Drainages and Roadways. Most of our work is done for City's, Towns, School Districts, Metro Districts, Recreation Districts and Landscape Contractors. We place great emphases on customer service and quality work.</p>
Availability	<p>We will be doing most all of the work in-house, with minimal subcontractors, we will be able to better control the schedule have the equipment, staff and knowledge, perfectly suited for a project of this nature, and the schedule works perfectly with current work load.</p>
Project Team	<p>William Kuhn Estimator/ Project Manager/ Superintendent 20 years of experience as operator, foreman, superintendent, project manager and estimator for earthwork, parks, trails and drainage projects. (See Projects Below). Will be onsite at least twice per day.</p> <p>Joe O'Brien Foreman/ Superintendent 35 years experience as operator, foreman and superintendent. (See Projects Below) Will be full time onsite.</p> <p>Austin Coffman Foreman/ Blade/ Loader Operator 24 Years experience as equipment operator/ Foreman. (See projects below.) Will be full time onsite</p>
Similar Projects	<p>2012 East West Regional Trail- Douglas County Parks- City of Lone Tree 16'940 LF of 8' Wide Crusher Fines Trail. Pioneer new trail with minimal disturbance.</p> <p>2013 Wildgrass Trail Phase 3- Wildgrass Subdivision- City of Broomfield 4'200 LF of 8' Crusher Fines Trail- 3500 CY of Earthwork and 1555 CY of Topsoil- New crusher fines trail through subdivision for recreational use.</p> <p>2013 Civic Center Trail and Memorial Park- Town of Bennett 3'825 LF of 8' sidewalk grading with 8340 CY of Grading and 6400 CY of Topsoil. New Park with sidewalk and improvements.</p> <p>2017 BRPOS Trails and Parking Lots/ Trail Heads- Town of Bennett 18,480' of new trail through Open Space for Residential Recreation</p> <p>2019 Deputy Zach S Parrish III Memorial Park- Town of Castlerock 11 Ac Park with Parking, Trails, Utilities, Playfields and Playgrounds</p> <p>2021 BRPOS Phase II Trails and Upper Pond Fill- Town of Bennett 29,100' of new trail through Open Space for Residential Recreation</p>

Kuhn Construction Inc.

Proposal # 1093-1

Project Name: **BRPS Lower Pond**

Owner/GC: **Town of Bennett**

Attn: **Robin Price**

Bid Date: **Thursday, February 10, 2022**

Base Bid	#	Description of Work	Quantity	Unit	Unit Rate	Total
		Mobilization/ Permits	1	LS	\$ 11,927.00	\$ 11,927.00
		Survey	1	LS	\$ 6,260.00	\$ 6,260.00
		Silt Fence	2100	LF	\$ 1.55	\$ 3,255.00
		Diversion Ditches and Check Dams	1	LS	\$ 3,865.00	\$ 3,865.00
		Pothole Ex Utilities	8	HRs	\$ 175.00	\$ 1,400.00
		Clear and Grub	1	LS	\$ 3,325.00	\$ 3,325.00
		Remove Ex Riprap and Stockpile	610	SY	\$ 6.70	\$ 4,087.00
		Strip Topsoil and Stockpile	4505	CY	\$ 3.65	\$ 16,443.25
		Site Grading- Cut to Fill	11360	CY	\$ 4.45	\$ 50,552.00
		Site Grading- Excess Cut to Berms	8544	CY	\$ 4.45	\$ 38,020.80
		Replace Topsoil	4505	CY	\$ 3.40	\$ 15,317.00
		24" CMP Culvert	200	LF	\$ 98.60	\$ 19,720.00
		24" CMP FES	8	EA	\$ 455.00	\$ 3,640.00
		6" Thick Class 5 Roadbase Parking Lot/ Access Road	3070	SY	\$ 9.35	\$ 28,704.50
		6" Thick Class 6 Pond Perimeter Trail	8560	SF	\$ 1.32	\$ 11,299.20
		8' Wide Trail Connection	933	SY	\$ 6.60	\$ 6,157.80
		CMU Block Retaining Walls	680	FF	\$ 36.20	\$ 24,616.00
		Shoreline Fishing Boulder Edge	105	LF	\$ 207.00	\$ 21,735.00
		Replace Stockpiled Riprap- (Buried)	600	TN	\$ 7.15	\$ 4,290.00
		Import and Place Type L Riprap	420	TN	\$ 68.65	\$ 28,833.00
		6" Thick Concrete Shelter Pads W Thickened Edge	1000	SF	\$ 13.35	\$ 13,350.00
		4" Thick Concrete Overlook	1080	SF	\$ 10.35	\$ 11,178.00
		Small Shelter- 16X16	1	EA	\$ 37,273.00	\$ 37,273.00
		Large Shelter- 24X24	1	EA	\$ 61,242.00	\$ 61,242.00
		Bike Racks	3	EA	\$ 975.00	\$ 2,925.00
		Boardwalk Footings	34	EA	\$ 998.00	\$ 33,932.00
		Boardwalk Railings- (Budget)	300	LF	\$ 102.00	\$ 30,600.00
		Boardwalk- 8' PermaTrak	150	LF	\$ 921.00	\$ 138,150.00
		Expose Ex Liner and Clean for Patch	222	LF	\$ 8.30	\$ 1,842.60
		30ML PVC Liner Material	10197	SF	\$ 0.86	\$ 8,769.42
		Installation of 30ML PVC Liner- (Welds to EX material are not Warrantied)	1	LS	\$ 25,547.00	\$ 25,547.00
		Install 12" Cover Material over Liner	385	CY	\$ 15.60	\$ 6,006.00
		Install Type L Riprap over Cover Material	1340	TN	\$ 26.50	\$ 35,510.00
		6" Class 5 Base Pond Access Rd	185	SY	\$ 9.35	\$ 1,729.75
		3 Rail Wood Fence	550	LF	\$ 30.00	\$ 16,500.00
		Erosion Control Blanket	15645	SY	\$ 2.05	\$ 32,072.25
		Seed and Hydromulch	7.4	AC	\$ 3,446.00	\$ 25,500.40
Base Bid Total						\$ 785,574.97

Inclusions/ Exclusions

- #1 Proposal Price includes only items specifically referenced- additional prices can be provided for additional work requested by Owner/GC
 - #2 Plans Provided for Bid: Terramax 1/13/22 Davis Bacon/ Prevailing Wage Included: No
 - #3 Specs Provided: None Addenda: 1 Soils Report: None
 - #4 Export: Not included Import: Not included. Site Must Balance. All quantities to be field measured
 - #5 Erosion Control Included in Proposal. Additional pricing can be provided upon request.
 - #6 Cost of Water Not included. Water source to be provided onsite by Owner/GC
 - #7 No Traffic Control or Utility Relocation Included
 - #8 Unseen Conditions including- ground water, storm water, rock, frost, mud, trash, debris etc.... will be addressed as a change order or T&M.
 - #9 No back charges will be accepted unless Kuhn Construction Inc. has been notified in writing, been given the option of repairing and or correcting the problem or a signed change order is issued
-



arrow - j landscape & design inc
909 East 68th Avenue
Denver, CO 80229

(303) 289-4388
Fax (303) 289-4363

2/10/22

RE: Introduction

Dear Sir,

Arrow J Landscape & Design has spent over forty years building it's reputation as a subcontractor that General Contractors and Owners can depend on to be efficient, competent, and professional. Our well-equipped, experienced field crews take pride in top-quality workmanship. Our professional office staff assures that your project will be completed on time and budget.

Our representative projects display a very wide scope of work for many private clients and virtually all public entities. From small to large, each project is important to the owner and we take your trust seriously providing exceptional quality and service. Our defining trait is attention to detail and communication with designers and customers.

We have experience in estimating and building a diverse range of projects from parks with shelters, open space trails and pedestrian bridges to anything that is site work related.

We appreciate your consideration and look forward to working with you.

Sincerely,

Gary Olson

Gary Olson, RLA
Project Manager/Estimator



arrow - j landscape & design inc
909 East 68th Avenue
Denver, CO 80229

(303) 289-4388
Fax (303) 289-4363

SELECTED REFERENCES

Completion	% In House	Contract	Project Information
6/21	70%	\$275,587	Carlson Elementary School Site Work Clear Creek School District Justin Watanabe Director of Facilities & Maint. 720-519-6482
4/21	80%	\$245,295	Wilson Community Garden II City of Lafayette Ben Mazal 303-661-1306 Kurt Munding Munding Design 720-273-3884
3/21	65%	\$150,000	Donelson Park Basketball Court City of Brighton Travis Haines 303-655-2086
11/20	75%	\$285,519	Pathways Future Center School Adams 12 Five Star School Lime Green Design Anne Desjardins 303-733-7558
9/20	45%	\$266,702	Central Park Playground Architerra Lesanne Domínguez 303) 948-0766
6/20	45%	\$1,244,970	High Plains Park & Blackstone Entry Lesanne Domínguez, PLA Architerra 303-948-0766

5/20	85%	\$923,625	Midtown Filing 6 Brookfield Homes Scott Sorknes 303-790-6590
6/20	45%	\$664,752	Brighton Parks Projects City of Brighton Parks Travis Haines 303-655-2086
8/19	65%	\$518,769	Jeffco Playgrounds 2019 Jeffco Schools Bernadette Kelly 303-982-2398
5/19	45%	\$2,636,274	Glenmoor Country Club Site Improvements Ryan Norris, General Manager 303-339-3542
9/18	55%	\$1,279,120	Silver Creek Park City of Lafayette Monte Stevenson, Director 303-665-5506 x3601
7/18	75%	\$1,040,145	McKay/Lambertson Adventure Playground City & County of Broomfield Kathryn Bergh 303-464-5802
6/18	60%	\$1,411,145	Broomfield Commons Cemetery City & County of Broomfield Ronda Jo Ackerman Alford 303-438-5807
12/17	90%	\$1,576,307	US 36 & Sheridan Improvements City of Westminster John Vann 303-658-2214
7/17	66%	\$448,724	Lincoln Commons Park Rampart Range Metro District 1 Diverse Project Consultants Ernie Warzecha (303) 902-2184

6/17	75%	\$1,546,668	Clear Creek Valley Park Hyland Hills Metro Dist Terry Barnhart 303-650-7609
11/16	70%	\$1,299,826	Midtown Filings 4&5 Clear Creek Metro Dist Chris Petro 303-790-6613
7/16	91%	\$117,963	East Side Landscape Imp. Denver Museum of Nature & Science Jeff Joplin 303-370-6046 Arch: Architerra Group- Mark Taylor (303) 948-0766
7/15	55%	\$1,161,910	Midtown Home Plate Park Clear Creek Metro Dist Chris Petro 303-790-6613
7/2015	35%	\$1,078,014	N Salida Way Extension Aurora Public Schools Cindy Sauls 303-326-1286
5/2014	45%	\$1,929,511	The Bay- Phase 2 City & County of Broomfield Ronda Jo Ackerman Alford 303-438-5807



arrow - j landscape & design inc
909 East 68th Avenue
Denver, CO 80229

(303) 289-4388
Fax (303) 289-4363

Gary Olson

Employment: 2005- Present Arrow J Landscape & Design, Inc. Denver, CO
Project Manager/Estimator

Responsible for meeting with clients along with submittals, purchase orders and other associated paperwork. Responsible for sales through hard bidding and negotiation. Proficient in budgets, computerized bid and proposal generation for landscape, irrigation and site work.

1995- 2005 Arrow J Landscape & Design, Inc. Denver, CO
Landscape Architect

Responsible for landscape & irrigation design of commercial properties.

1988-1995 Arrow J Landscape & Design, Inc. Denver, CO
Landscape Superintendent

Responsible for supervising installation of landscape construction projects. Oversaw all aspects of construction on the job site.

Education: Colorado State University
B.S. Landscape Architecture

Accreditations: Registered Colorado Landscape Architect #LA-730
Certified Irrigation Designer- Commercial



arrow - j landscape & design inc
909 East 68th Avenue
Denver, CO 80229

(303) 289-4388
Fax (303) 289-4363

Emilio Montes

Employment: 1989-Present Arrow J Landscape & Design, Inc.

Project Foreman;

Has developed the ability to organize and install projects of increasing complexity including multifaceted projects involving paving, flatwork, wall construction, earthwork and utility construction along with landscape installation. Beginning as a leadman, he has assumed increasing responsibility and has successfully installed projects in the \$3M range.

Education: Primary Education Perivan, de Ramos,
Michoacan, Mexico

Accreditations: Hazmat/MSDS Training
First Aid/CPR
Defensive Driving
OSHA Training Seminars

Kuhn Construction Inc.

Proposal # 1093-1

Project Name: **BRPS Lower Pond**

Owner/GC: **Town of Bennett**

Attn: **Robin Price**

Bid Date: **Thursday, February 10, 2022**

Base Bid	#	Description of Work	Quantity	Unit	Unit Rate	Total
		Mobilization/ Permits	1	LS	\$ 4,825.00	\$ 4,825.00
		Survey	1	LS	\$ 6,260.00	\$ 6,260.00
		Silt Fence	2100	LF	\$ 1.55	\$ 3,255.00
		Diversion Ditches and Check Dams	1	LS	\$ 3,865.00	\$ 3,865.00
		Pothole Ex Utilities	8	HRs	\$ 175.00	\$ 1,400.00
		Clear and Grub	1	LS	\$ 3,325.00	\$ 3,325.00
		Remove Ex Riprap and Stockpile	610	SY	\$ 6.70	\$ 4,087.00
		Strip Topsoil and Stockpile	4505	CY	\$ 3.65	\$ 16,443.25
		Site Grading- Cut to Fill	11360	CY	\$ 4.45	\$ 50,552.00
		Site Grading- Excess Cut to Berms	8544	CY	\$ 4.45	\$ 38,020.80
		Replace Topsoil	4505	CY	\$ 3.40	\$ 15,317.00
		24" CMP Culvert	200	LF	\$ 98.60	\$ 19,720.00
		24" CMP FES	8	EA	\$ 455.00	\$ 3,640.00
		6" Thick Class 5 Roadbase Parking Lot/ Access Road	3070	SY	\$ 9.35	\$ 28,704.50
		6" Thick Class 6 Pond Perimeter Trail	8560	SF	\$ 1.32	\$ 11,299.20
		8' Wide Trail Connection	933	SY	\$ 6.60	\$ 6,157.80
		Shoreline Fishing Boulder Edge	105	LF	\$ 207.00	\$ 21,735.00
		Replace Stockpiled Riprap- (Buried)	600	TN	\$ 7.15	\$ 4,290.00
		Import and Place Type L Riprap	420	TN	\$ 68.65	\$ 28,833.00
		Install Type L Riprap over Cover Material	260	TN	\$ 26.50	\$ 6,890.00
		6" Class 5 Base Pond Access Rd	185	SY	\$ 9.35	\$ 1,729.75
		3 Rail Wood Fence	550	LF	\$ 30.00	\$ 16,500.00
		Erosion Control Blanket	15645	SY	\$ 2.05	\$ 32,072.25
		Seed and Hydromulch	7.4	AC	\$ 3,446.00	\$ 25,500.40
		Raven Liner Quote	1	LS	\$ 128,634.80	\$ 128,634.80
		Prep for Liner Install, Excavate Anchor Trench and Place 1' of Cover Material	1	LS	\$ 88,274.75	\$ 88,274.75
		Liner Material Cut Pieces and Waste Disposal	1	LS	\$ 2,668.50	\$ 2,668.50
Base Bid Total						\$ 574,000.00



PO Box 777 Craig, CO 81626 (970) 824-0382 Fax (970) 629-8536

Solicitation ID BRPS Lower Pond, Town of Bennett
Anson Excavating & Pipe, Inc. Proposal Notes and Conditions

Feb 10, 2022

Project team:

Employees have careers in the construction industry, many life-long.

Subcontractors made include RCP Shelters; local concrete contractor; local steel fabrication/welding

Project Schedule:

- We will provide the owner with a project schedule in the form of Microsoft Projects.
- We propose to start mobilization on Mar 28, 2022.
- Dirt work will begin immediately after, weather and soil conditions permitting.
- The walkway and shelters may have long lead times, they will be ordered immediately if part of the final design.

REQUEST FOR PROPOSALS

Cover Sheet



welcome neighbors.

Date of RFP Issuance: 1/13/22
Project Number: 22-002
RFP Title: Bennett Regional Park and Open Space Lower Pond Fishing Improvements
Proposals Due: February 10, 2:00 p.m., Local Time
Submit Proposals to: rprice@bennett.co.us

Town Hall, 207 Muegge Way, Bennett, CO 80102-7806

For Additional Information Please Contact: Dan Giroux
(303) 644-3249 Ext. 1009
Email: dangiroux@terramax.us

Documents Included in This Package:
RFP Cover Sheet
Project Background and Specifications
RFP Instructions
Terms and Conditions
Special Terms and Conditions
Pricing Form
Submission Form
Substitute Form W-9
Sample Agreement

If any of the documents listed above are missing from this package, they may be requested via email or picked up at Town Hall, 207 Muegge Way, Bennett, Colorado.

The undersigned hereby affirms that (1) he/she is a duly authorized agent of the Proposer, (2) he/she has read all terms and conditions and technical specifications which were made available in conjunction with this RFP and fully understands and accepts them unless specific variations have been expressly listed in his/her offer, (3) the offer is being submitted on behalf of the Proposer in accordance with any terms and conditions set forth in this RFP, and (4) the Proposer will accept any awards made to it as a result of the offer submitted herein for a minimum of ninety calendar days following the date of submission.

PRINT OR TYPE YOUR INFORMATION

Name of Company: Anson Excavating Fax: 970-824-0536
Address: 789 Stock Dr. City/State: Craig CO Zip: 81625
Contact Person: Mike Miles Title: Estimator Phone: 970-824-0382
Authorized Representative's Signature: [Signature] Phone: 970-824-0382
Printed Name: Mike Anson Title: President Date: 2-8-2022
Email Address: mike@ansonexcavating.com



Anson Excavating and Pipe Inc.

P.O. Box 777

Craig Co. 81626

Contact: Mike Anson

Phone: (970) 824-0382

Fax: (970) 824-8536

Quote To:

Town of Bennett
Dan Giroux, PE
207 Muegge Way, Bennett, CO, 80102
303-644-3249

Job Name:

BRPOS Pond Improvements

Date of Plans:

1/13/2022

Phone:

Fax:

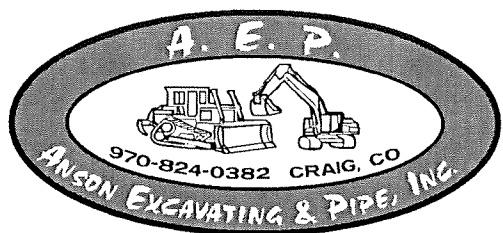
Revision Date:

Please see additional sheets, as they are part of this proposal.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
100	Mobilization	1.00	LS	48,000.00	48,000.00
200	Initial Erosion Control	1.00	LS	12,250.00	12,250.00
300	Pond Grading and Shaping	1.00	LS	177,500.00	177,500.00
350	Culverts, 24"	4.00	EA	10,500.00	42,000.00
400	Entry Road & Parking	1.00	LS	147,000.00	147,000.00
500	16x16 shelter, complete	1.00	EA	42,500.00	42,500.00
550	24x24 shelter, complete	1.00	EA	65,500.00	65,500.00
600	Riprap	900.00	TN	24.05	21,645.00
700	Raven liner & splicing	1.00	LS	47,000.00	47,000.00
800	Pedestrian walkway, complete	150.00	LF	1,894.00	284,100.00
900	Trails	1.00	LS	27,000.00	27,000.00
950	16' Maintenance access	1.00	LS	7,550.00	7,550.00
1000	Boulders	100.00	TN	199.50	19,950.00
1100	Erosion Control Final	1.00	LS	55,800.00	55,800.00

GRAND TOTAL

997,795.00



PO Box 777 Craig, CO 81626 (970) 824-0382 Fax (970) 629-8536

Solicitation ID BRPS Lower Pond, Town of Bennett
Anson Excavating & Pipe, Inc. Proposal Notes and Conditions

Feb 10, 2022

These notes are a part of the proposal pricing tabulated on a separate sheet.

No bond cost has been included with this proposal because it is assumed that the final contract price will be different. The owner should expect a 3% addition to the final contracted price to account for bonding.

Item 350

Estimated 360 LF 24" CMP and 4 FES

Item 400

1400 tons imported Class 6

325 tons imported recycled asphalt

300 LF 3-rail 1 1/2" steel pipe fence, painted -- \$150/lf budgeted, actual cost may be different.

Items 500 & 550

Price increase expected at time of ordering due to commodity market.

Item 600

Imported riprap estimated at 150 tons. Unit cost for placing additional is \$52.00/ton, full semi truckloads only.

Item 700

Raven Industries estimated 10,000+ SF of new liner

Item 800

Handrail budgeted at \$200/lf. This is the same style as the parking area fence. Installation accounts for the price difference. The fabrication shop would not install, so the rail is proposed as 10-20 LF sections bolted to the concrete walkway. More posts are required with this design.

Permatrak design calls for 18" x 42" piers, 34 total.

Item 900

Imported Class 6 – 160 ton

Imported asphalt millings – 75 ton

Item 950

Imported Class 6 – 60 tons

Imported asphalt millings – 20 ton

Item 1000

100 tons placed along the new bank, within machine reach. Actual tons placed will vary, but only full semi loads will be utilized.

Item 1100

Estimated 5 acres to be reseeded and hydromulched.

Estimated 10,000 SF of RECP in the drainages and outflow areas.

PRICING FORM

I PRICING (FOR EACH PARTICIPANT)

ITEM	QTY	UNIT	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1			See Construction Plans		\$0.00
2					\$0.00
3					\$0.00
4					\$0.00
5					\$0.00
6					\$0.00
7					\$0.00
8					\$0.00
9					\$0.00
10					\$0.00
Total					\$0.00

Not to Exceed Total: \$1,027,728.85

(bid tab "Not to exceed" plus 3% bond cost)

SUBMISSION FORM

SUBMISSION: It is imperative, when submitting a bid/proposal, that you address the envelope as follows:

Town of Bennett
ATTN: Purchasing
207 Muegge Way
Bennett, CO 80102

Attn: Robin Price
Public Works Director
RFP: 22-002 BRPOS Lower Pond Fishing Improvements

Does your proposal comply with all the terms and conditions? If no, indicate exceptions

YES / NO

Does your proposal meet or exceed all specifications? If no, indicate exceptions

YES / NO

State percentage of prompt payment discount, if offered

2 %

State total bid price (include all items bid)

\$ 1,027,728.85

State total bid price with discount

\$ 1,007,174.27

The Town of Bennett must have on file a completed W-9 prior to doing business with Contractors. Please submit the attached form with your Proposal.



Town of Bennett

207 MUEGGE WAY
BENNETT, COLORADO
80102-7806
(303) 644-3249

REQUEST FOR PROPOSALS ADDENDUM #1

Date: February 1, 2022

Proposal Number: RFP 22-002

Proposal Title: Bennett Regional Pond and Open Space Lower Pond Fishing Improvements

For Additional Information Please Contact: Dan Giroux, PE, Town Engineer
(303) 644-3249 ext 1009
dangiroux@terramax.us

Documents Included in Addendum #1: New Instructions below / RFI Responses

This Addendum supersedes previously issued "Request for Proposal" (RFP) Documents by adding to, deleting from and/or modifying them as set forth herein. To the extent any such addition, deletion or modification result in any conflict or inconsistency between the previously issued RFP Documents and this Addendum, this Addendum shall take precedence.

Request for Proposals, various sections and information previously provided are clarified or modified via the following information, provided as responses to submitted questions:

1. The plans call for importing trail material from the Town's 4th Street yard location, but that material has been exhausted per prior Town RFP info; is that import instruction still accurate for this work? ***The materials at the Town's 4th Street yard have been exhausted, and are not available for this project. All trail, parking lot and access road materials as shown on the plans will need to be provided by the Proposing firm as imported CDOT Class 6 Aggregate Base Course (road base) material.***
2. Does the Town have information on the existing pond liner? ***The previous pond liner supplier was Raven Lining Systems www.ravenlining.com . Raven has been contacted and is aware of this Project. They have indicated they cannot warranty a splice to the existing liner, nor the existing liner material. The Town will accept the splice and existing liner condition as an Owner Risk, NOT subject to the Contractor warranty requirements of the remainder of the project.***
3. How is the excess material quantity shown on the plans from the west pond excavations to be disposed of or used? ***Any excess material yielded from the west ponds excavation and construction will be used for ramp construction grading within the project ponds, for access ramp extensions, widening, or additional access ramps. The Proposer shall assume placement, compaction and shaping effort consistent with pond access ramp construction as described. Surfacing of these additional ramp areas will NOT be required, outside the surfacing areas currently shown on the plans.***

4. Is the Proposal to include the walkway and shelters? ***Yes, the walkway and shelters are to be included in the Proposal, including all costs of engineering, fabrication, shipping, delivery, foundation, and installation/assembly, with paint/coating or touch-up as needed.***
5. Are there specifications for these?
- The Town uses RCP Shelters <https://www.rcpshelters.com/square/> these are to be square, one 16' x 16' and one 24' x 24'.
 - The Town has specified PermaTrak walkway <https://www.permatrak.com> for an 8-foot clear (between rails) x 150' length.
 - These structures are subject to Bennett area snow and wind loading requirements, per IBC 2018, and for location Latitude 39.70398 Longitude - 104.397039 at elevation 5520 above MSL, with maximum wind exposure condition.
 - The walkway shall be sufficient to support a 100 PSF live load on deck, and a 200 pound lateral point load at top-rail, mid-span, PLUS 50 PLF continuous wind load on the side rails.
 - For foundations, structural supports will need to be below 36-inch depth for frost protection, and soils may be assumed to support loading of 1,500 PSF bearing pressure. Skin friction of 1,000 PSF may only be considered for depths below 24-inches.
 - The soils are sandy silt to clayey silt, and are not expected to exhibit excessive expansion, heave or uplift pressures on the structures. Long-term structural heave or settlement due to area soils (and not due to construction placement or compaction deficiencies) of less than 1-inch will be acceptable for these, as outdoor, uninhabitable structures without windows, doors or utility connections.
 - Shelter slabs on grade may have thickened edges to 12-inch depth below adjacent finished grade, and DO NOT need to extend below frost protection depth.
6. Are the electric power relocation and extension to be included with this Proposal? ***No, the Town will directly Contract for and provide the electric power relocation and extensions as shown on the plans. The Proposer does NOT need to include this in his Proposal.***
7. Is the existing pond currently drained? ***The Proposer must familiarize themselves with the Site and Site Conditions to their satisfaction and protection in developing a fully informed Proposal. With that important reminder noted, yes, the pond is currently empty, having been completely drained Summer 2021, and the bottom and side materials have been drying out since that time.***
- ***The pond is filled with well groundwater, but is also at the base of a 500-acre tributary drainage basin, with a few dozen home sites and Town roads within the basin.***

- *The drainage basin can and does yield runoff and sediment in storm events.*
 - *The Proposer will need to consider this in Project scheduling and staging, to protect his ongoing work and access.*
 - *The Town will allow use of the planned west ponds shown on the plans for flood and sediment control.*
 - *Other upstream cofferdams may be allowed by arrangement with the Town.*
 - *Erosion and sediment damage incurred during construction for the Project work area will need to be addressed: regraded and seeded before final Project review and acceptance.*
8. Is the existing pond riprap armoring, to be salvaged per the plans, sufficient to meet all riprap armoring requirements of the new Project improvements as shown on the plans? ***No, the existing riprap on-site is not expected to be sufficient to meet the total riprap armoring requirements of the Project. The Town estimates 750 tons of existing salvageable riprap material on-site, but a new, total riprap armoring requirement of 900 tons, for a net import of 150 new tons of riprap rock required for the Project improvements. The Proposer will be required to import that 150 tons of riprap, for final placement of 900 tons of riprap overall per the Project plans.***

Suggested Motion

I move to authorize the Mayor and the Town of Bennett to enter into a standard Town contract agreement with the updated Kuhn Construction, Inc. proposal dated February 10, 2022 in the amount not to exceed \$574,000.

STAFF REPORT



welcome neighbors.

TO: Mayor and Town of Bennett Board of Trustees
FROM: Daymon K. Johnson, Capital Projects Director
DATE: February 22, 2022
SUBJECT: Lefever Building Systems – Change Order PW-007

Background

The Town contracted Lefever Building Systems (LBS) to complete the construction of our new Public Works facility on the NOMCOM Campus. The contract date between LBS and the Town was 5/24/2021 and was for a total of \$2,856,110 with a date of completion of 5/31/2022.

The date of substantial completion initially was 4/1/2022; however, due to delays with materials, the completion has been amended to 5/31/2022.

Summary of Change Orders to date

Through various cost analyses and material discussions, Town staff has reviewed and processed change orders to date as a part of the allowable contingency of the contract. Staff value engineered a deduction of \$168,056 for grading and site utilities, taking the contract well below its initial estimate. Below is a screenshot of the current change order log.

CURRENT CHANGE ORDER STATUS						
CO #	Description	Cost	Contract Amt.	Project	Off Project	Status
ms	Phase I	PO# 1000	\$ 2,820,154.00			
001A	Bond Requirements	\$ 35,956.00		\$ 35,956.00		
002	Kuhn Construction Reduction	\$ (168,056.00)		\$ (168,056.00)		
004	Construction Fencing	\$ 5,173.00		\$ 5,173.00		
005	Asphalt Contractor Change	\$ 21,439.00		\$ 21,439.00		
006	LBS Material Escalation	\$ 182,518.00		\$ -		
				\$ -		
				\$ -		
				\$ -		
				\$ -		
				\$ -		
				\$ -		
		\$ 77,030.00	\$ 2,897,184.00	\$ 2,897,184.00		3%

Per the finance policy, Staff is seeking Board consideration of change order PW-007 for \$182,518, which is 5% of the contract total.

The first part of this change (\$134,349) is the materials and labor for tenant improvements (TI). At the contract, Staff was operating on budget allowance for the TI work, understanding the TI drawings were not final. Final drawings were completed and released by D2C Architects on 6/15/2021, followed by the procurement of TI materials on 2/15/2022. Furthermore, the finalized TI work includes a fire sprinkler system, additional lighting and fixture upgrades, the interior door package and radiant heaters. These items were budget allowances in the initial core and shell drawings and included the GMP proposal;

however, some of those budget allowances were lower than current pricing and those material changes are what is shown here.

The second half of this change order (\$48,169) on page 2 is for material increases from suppliers. Simply put, the materials market volatility right now, and for the last several months, has been at an unprecedented level. Some suppliers are holding pricing for less than 24hrs. This cost is directly attributed to materials shortages and/or changes relating to materials availability and pricing fluctuations.

Overall, while this change order is \$182,518, the total contract change is an additional \$77,030. This overage is covered in the Public Facilities Impact Fund.

Staff Recommendation

Staff recommends the Board of Trustees authorize Town Staff to execute a Change Order (PW-007) with Lefever Building Systems in an amount not to exceed \$182,518 for contractor services to continue the construction of the new Public Works facility.

Attachments

1. Summary of Changes
2. Change Order No. 1
3. Change Order No. 2

Lefever Building Systems

Project :	Bennett Public Works Shop
Location:	Bennett, CO
Scope:	General Contractor

Summary of Proposal Costs

Division	Description	Budget Cost	Actual Cost	Delta	COR	Notes
Div.8	Doors & Windows					
	Overhead Doors	\$ 59,586.00	\$ 66,981.00	\$ (7,395.00)	\$ 6,043.00	Steel Increase. Atatched COR from vendor and original quote from time of award. We are absorbing part of the increa due to delay with processing submittal
	Man Doors	\$ 41,822.00	\$ 59,952.00	\$ (18,130.00)	\$ 18,841.00	Base bid included 14 doors; 7 flush and 7 narrow lites doors with Stanley hinges. 100% Drawings show 18ea. Doors total. Adding 1 single and 3 double doors. Reference Scope letter from March 2021 and door schedule from 100%TI from Sept 2021
	Storefronts	\$ 34,381.00	\$ 38,986.00	\$ (4,605.00)	\$ 5,158.00	Glass/Steel increase only - Letters of increase attached
Div. 9	Finishes	Budget	Actual	Delta	COR	Notes
	Tenant Finishes	\$ 119,025.00	\$ 136,725.00	\$ (17,700.00)	\$ 19,264.00	Light gauge steel increase, fiberglass insulation increase. New drawings show insulation going above finished ceiling, will cover at no extra cost
Div.10	Specialties	Budget	Actual	Delta	COR	Notes
	Fire Protection Specialties	\$ -	\$ 51,831.00	\$ (51,831.00)	\$ 13,631.00	Mezzanine space originally designed as a Non-Occupied non-sprinklered space. Changed to occupied and fully sprinklered, added materials described in COR + the cost for additional engineering and separate permit cost. NOTE: All Fire Suppression was originally excluded in our contract. We are only requesting compensation for actual cost on TI Changes and absorded cost for the Core & Shell to avoid delays in the permitting
Div.15	Mechanical	Budget	Actual	Delta	COR	Notes
	Plumbing-					
	Radiant Heaters	\$ -	\$ 20,119.00	\$ (20,119.00)	\$ 22,545.00	Non shown in the Core & Shell. Added to TI design.
	Floor sinks	\$ -	\$ 935.00	\$ (935.00)		Added two floor sinks to T&I drawings where C&S had the FS-1 pipe to be caped for future
	HVAC -					
	Exhaust Fans	\$ 4,640.00	\$ 5,800.00	\$ (1,160.00)	\$ 1,300.00	No mechanincal schedule for the C&S, assumed EF for bathrooms only. TI added one EF for the janitor room and added duct to brake room
	Electrical					



- Roof Insulation – R-25 2-layer system 8" in the cavity + 2" overlay, with MBI Safety Liner
- Wall Insulation – R-25 single layer system 8" in the cavity.

Note: Thermal Blocks included

Division 8:

- Storefronts – 12ea. WF-01, 3ea. WF-02, 2ea. WF-03, 1ea. WF-06, 1ea. WF-07 double pane glass. 4ea. WF-54, 1ea. WF-51, 2ea. WF-52 and 7ea. WF-53 Single pane ¼ tempered.
- Hollow metal doors & frames – 10ea. HM DRs as followed: 2ea. Flushed single, 1ea. Flushed double and 7ea. Singles with lite kits. 16ea. Frames 16Ga.

Note: High gloss paint is not recommended. If used, prior notification is required

- Hardware – Mortise locks, grade 1 cylindrical locks, padlocks and cylinders, Stanley hinges, closers and exit devices, Trimco trim, Pemco weatherstripping – Brushed chrome, stainless steel and aluminum finishes.
- Overhead doors – 8ea. series 426 14"x14' 24ga. roll-formed ribbed galvanized steel sections with expanded polystyrene insulation and 26ga. steel back covers; R-7.35. Single

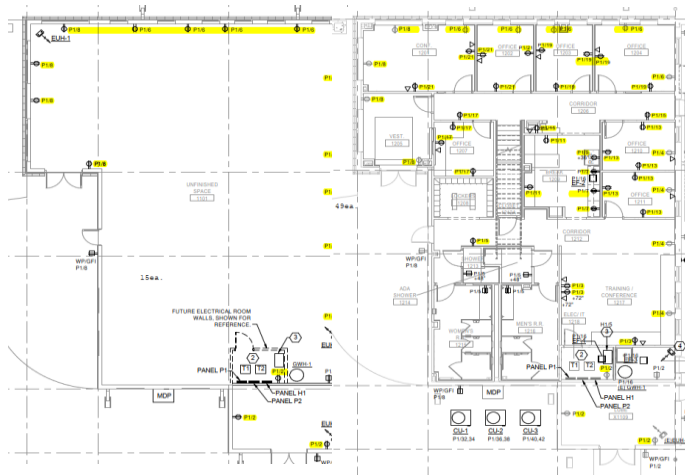
NUMBER	NOMINAL DIMENSIONS			DOORS			DOOR FRAMES			FIRE RATING	HWRE. GRP.
	WIDTH	HEIGHT	THICKNESS	TYPE	CONST.	FINISH	TYPE	MAT.	FINISH		
1201	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	105
1202	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	105
1203	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	105
1204	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	105
1205	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	107
1207	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	105
1210	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	105
1211	3'-0"	7'-0"	1 3/4"	WF	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	105
1212A	3'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	110
1213	3'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	109
1214	3'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	106
1215	3'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	107
1216	3'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	107
1218	3'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	104
2101	3'-0"	7'-0"	1 3/4"	WN	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	111
2102A	6'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	112
2102B	6'-0"	7'-0"	1 3/4"	FL	WOOD	STAIN	DF-01	HOLLOW METAL	PAINT	---	112
2103	6'-0"	7'-0"	1 3/4"	FL	HOLLOW METAL	PAINT	DF-01	HOLLOW METAL	PAINT	---	112

- Alternatives (if any) will be specifically and individually proposal.

Exclusions: The following lists all items that are not specil scope. These items are not included in the proposal cost o include:

1. Chemical stabilization of subgrade
2. Dewatering
3. Color or patterned concrete
4. Textura for billings
5. Re-seeding or landscaping
6. L shape items in brake room
7. Furniture (copy machine, refrigerator, microwave, TV etc.)
8. Cranes, crane beams and loading
9. Special RTU loadings not listed
10. PVC liner and epoxy coatings
11. Sprinklers system or other Fire suppression systems

Power Outlets	\$ 7,900.00	\$ 34,982.00	\$ (27,082.00)	\$ 31,203.00	No TI drawings available, assumed 30 add'l std outlets and 4ea GFCI for both stories. TI added 55ea. Combined plus at garages. Added 2ea. Circuits for drop cords in shopbay
Mechanical Installation	\$ 11,432.00	\$ 21,508.00	\$ (10,076.00)	\$ -	There was a delta for hook ups for Mechanical equipment between C&S and T&I. Lefever assumed responsibility for the difference
MEP Price increases	\$ -	\$ 15,807.00	\$ (15,807.00)	\$ 15,807.00	Letters of increase have been provided



Core & Shell First floor outlets

TI First floor outlets



- All duct work at office are
- Grilles and registers
- Air Balance
- Start-up
- Electrical – Includes:
 - Temporary power
 - Lighting and controls
 - 6ea. Light poles, 2ea. bollards and trenching, and 1ea. monume
 - 28ea. Power outlet openings
 - 8ea. 208V Garage door controllers, power connections (Discon drawings so we did not quoted).
 - 8ea. Electric unit heaters
 - 10ea. Power receptacles first floor
 - 30ea. standard power outlets assumed for TI and 4ea. GFCI
 - 86ea. Mounted lighting fixtures with 11ea. Lighting control de



Town Of Bennett

CHANGE ORDER – PW-006

Date: 1/10/2022

Original PO: 1000

Vendor: Lefever Building Systems

1.	Description/Explanation: Add for material escalation costs, final TI drawings from initial contracted estimate.	\$ 182,518.00
2.	Description/Explanation:	\$
3.	Description/Explanation:	\$

Original Contract Amount: \$ 2,820,154

Total Previous Change Orders: \$ -105,488

Change Order Amount: \$ 182,518

Percentage of Change: % .06

Revised Contract Amount: \$ 2,897,184

Section 30 - PURCHASE ORDER(S) POLICY AND PROCEDURE of your finance policy states:

Purchase Order Amendments:

A purchase order amendment shall be required when an amendment to an existing purchase order is necessary. If the amendment is less than 5% or \$500 (whichever is less) then the amendment will be automatic, meaning that the Treasurer will pay the invoice if all the required documents are provided in the check request. If the amount is greater than 5% or \$500 (whichever is less) then the approval process must be initiated again.

We hereby agree to the above as an additional/reduced project cost(s) to be added/deleted to the original scope of work:

Department Head

Date

CHANGE ORDER NO. 2

DATED: February ___, 2022

PROJECT: NORTH MUNICIPAL COMPLEX (NOMCOM) PUBLIC WORKS FACILITY PROJECT

OWNER: TOWN OF BENNETT, COLORADO

The following changes are hereby made to the Contract Documents:

Description: The date for achieving Substantial Completion of the Work under Section 3.3.1 of the Agreement is hereby changed from April 1, 2022 to May 31, 2022.

ADJUSTMENT TO CONTRACT TIME:

Original contract time (days or date) – Substantial Completion Date	April 1, 2022
Net change previous Change Orders No. __ to __ (days)	_____
Contract time prior to this Change Order (days or date)	_____
Net Adjustment Resulting from this Change Order (days)	_____
Current contract time including this Change Order (days or date)	May 31, 2022

Recommended:

D2C ARCHITECTS, INC.
ARCHITECT

By: _____

Date: _____

Approved:

TOWN OF BENNETT, COLORADO _
OWNER

By: _____

Date: _____

Accepted:

LEFEVER BUILDING SERVICES
CONTRACTOR

By: _____

Date: _____

Suggested Motion

I move to authorize Town Staff to execute change order PW-007 with Lefever Building Systems in an amount not to exceed \$182,518 for contractor services to continue the construction of the new Public Works facility.